

(12) **United States Patent**
Le et al.

(10) **Patent No.:** **US 10,288,071 B2**
(45) **Date of Patent:** ***May 14, 2019**

(54) **BEARING AND SHAFT ASSEMBLY FOR JET ASSEMBLIES**

(71) Applicants: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US)

(72) Inventors: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US)

(73) Assignee: **Luraco, Inc.**, Arlington, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **15/854,767**

(22) Filed: **Dec. 27, 2017**

(65) **Prior Publication Data**

US 2018/0128273 A1 May 10, 2018

Related U.S. Application Data

(63) Continuation of application No. 15/854,747, filed on Dec. 26, 2017, now Pat. No. 10,215,178, which is a (Continued)

(51) **Int. Cl.**

A61H 33/00 (2006.01)

F04D 13/02 (2006.01)

(Continued)

(52) **U.S. Cl.**

CPC **F04D 13/024** (2013.01); **F04D 13/026** (2013.01); **F04D 13/0633** (2013.01);

(Continued)

(58) **Field of Classification Search**

CPC .. **F04D 13/026**; **F04D 13/024**; **F04D 13/0633**; **F04D 13/064**; **F04D 29/0465**;

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,506,886 A 5/1950 Okulitch et al.

2,545,422 A 3/1951 Blom

(Continued)

FOREIGN PATENT DOCUMENTS

CA 1286755 C 7/1991

CN 203396450 U 1/2014

(Continued)

OTHER PUBLICATIONS

ANS Gspa F Pedicure Spa (<http://buynailsdirect.com/nails-salon-pedicure-spas/glass-sink-spas/ans-gspa-f-pedicure-spa.html>), Aug. 15, 2016.

(Continued)

Primary Examiner — Nathan C Zollinger

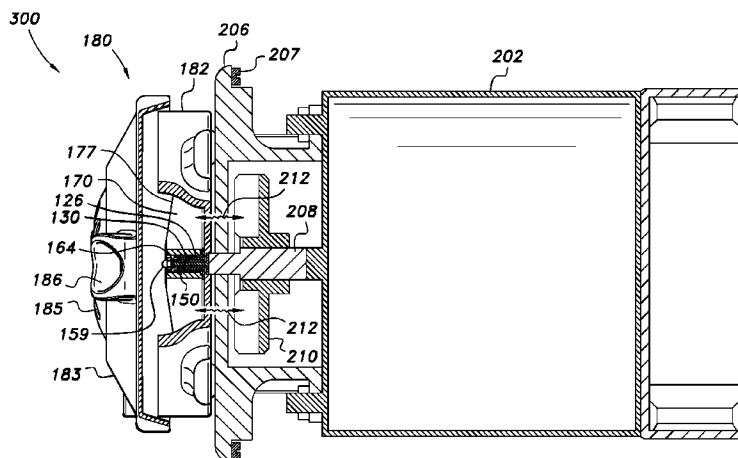
(74) *Attorney, Agent, or Firm* — Hoang Steve Ngo

(57)

ABSTRACT

An improved bearing and shaft assembly includes a bearing assembly having an outer bearing member and an inner bearing member, and a shaft assembly having a shaft member, a shaft protection member, and a locking mechanism. The outer bearing member has a cavity for receiving the inner bearing member, and fits within a cavity of an impeller. The shaft assembly is secured within a housing of a jet assembly. The shaft protection member has a cavity for receiving the shaft member. The shaft protection member fits within the cavity of the inner bearing member. Also, a jet assembly, which includes the improved bearing and shaft assembly, may be coupled to a motor assembly. The jet assembly further includes the housing that includes at least one inlet aperture and at least one outlet aperture, and an impeller positioned within a cavity of the housing.

30 Claims, 9 Drawing Sheets



US 10,288,071 B2

Page 2

Related U.S. Application Data

continuation of application No. 13/923,364, filed on
Jun. 20, 2013, now Pat. No. 9,926,933.

(51) Int. Cl.

F04D 13/06 (2006.01)
F04D 25/02 (2006.01)
F04D 25/06 (2006.01)
F04D 29/046 (2006.01)
F04D 29/047 (2006.01)

(52) U.S. Cl.

CPC **F04D 25/026** (2013.01); **F04D 29/047**
(2013.01); **F04D 29/0465** (2013.01); **A61H**
33/0087 (2013.01); **F04D 13/064** (2013.01);
F04D 25/06 (2013.01)

(58) Field of Classification Search

CPC F04D 29/047; F04D 25/06; F04D 25/026;
A61H 33/087
USPC 417/420
See application file for complete search history.

(56) References Cited**U.S. PATENT DOCUMENTS**

2,951,689 A 9/1960 Asp et al.
2,958,517 A 11/1960 Harker et al.
3,089,514 A * 5/1963 Sudmeier F16L 55/00
137/563
3,198,125 A * 8/1965 Yuza H02K 49/108
310/104
3,299,819 A 1/1967 McCoy
3,411,450 A 11/1968 Clifton
3,572,651 A 3/1971 Harker
3,630,645 A 12/1971 Eheim
3,932,068 A 1/1976 Zimmermann
3,941,517 A 3/1976 Miyahara
4,082,380 A 4/1978 Klaus et al.
4,115,040 A 9/1978 Knorr
4,135,863 A 1/1979 Davis et al.
4,226,574 A * 10/1980 Villette F04D 7/06
310/104
4,304,532 A 12/1981 McCoy
4,312,752 A 1/1982 Malik
4,331,496 A * 5/1982 Orndorff, Jr. B29C 70/08
156/187
4,513,735 A 4/1985 Friedson et al.
4,523,580 A 6/1985 Tureaud
4,569,337 A 2/1986 Baumann et al.
4,606,698 A 8/1986 Clausen et al.
4,716,605 A 1/1988 Shepherd et al.
4,875,497 A 10/1989 Worthington
4,982,606 A 1/1991 Adamski et al.
5,145,323 A 9/1992 Farr
5,238,369 A 8/1993 Farr
5,245,221 A 9/1993 Schmidt et al.
5,414,878 A 5/1995 Booth
5,458,459 A 10/1995 Hubbard et al.
5,587,023 A 12/1996 Booth
5,980,112 A * 11/1999 Matthews F16C 17/14
384/275
5,992,447 A 11/1999 Miller et al.
6,732,387 B1 5/2004 Waldron
6,997,688 B1 2/2006 Klein et al.
7,108,202 B1 9/2006 Chang
7,111,334 B2 9/2006 Chen
7,168,107 B2 1/2007 Gruenwald
7,393,188 B2 7/2008 Lawyer et al.
7,432,725 B2 10/2008 Sieh et al.
7,440,820 B2 10/2008 Gougerot et al.
7,574,756 B2 8/2009 Tran
7,593,789 B2 9/2009 Gougerot et al.

8,214,937 B2 7/2012 Lawyer et al.
8,296,874 B2 10/2012 Galati, Jr. et al.
8,380,355 B2 2/2013 Mayleben
8,531,048 B2 9/2013 Tran et al.
8,657,583 B2 2/2014 Ward
8,662,848 B2 3/2014 Tran
8,936,444 B2 1/2015 Drechsel et al.
8,944,786 B1 2/2015 McDougall
9,220,657 B2 12/2015 Stauber et al.
9,450,475 B2 9/2016 Zumstein
9,551,343 B2 * 1/2017 Marks A01K 63/047
9,572,747 B2 2/2017 Tran et al.
9,926,933 B2 * 3/2018 Le F04D 29/0465
2005/0045621 A1 3/2005 Chenier et al.
2005/0262627 A1 12/2005 Chen
2006/0096021 A1 5/2006 Hutchings
2007/0101489 A1 5/2007 Hutchings
2008/0035427 A1 2/2008 Fowler
2008/0229819 A1 9/2008 Mayleben et al.
2009/0064406 A1 3/2009 Lawyer et al.
2009/0094736 A1 4/2009 Booth et al.
2010/0074777 A1 3/2010 Laufer et al.
2010/0239435 A1 9/2010 Le et al.
2011/0004994 A1 1/2011 Le et al.
2011/0116948 A1 5/2011 Yi et al.
2011/0211982 A1 * 9/2011 Marks A01K 63/047
417/420
2011/0223047 A1 9/2011 Tran et al.
2011/0253236 A1 10/2011 Le et al.
2011/0305562 A1 12/2011 Matsunaga et al.
2012/0045352 A1 2/2012 Lawyer et al.
2012/0156071 A1 6/2012 Hijikata et al.
2013/0022481 A1 1/2013 Schob et al.
2013/0263438 A1 10/2013 Burns et al.
2015/0005682 A1 1/2015 Danby
2015/0129039 A1 5/2015 Mulvaney
2015/0227145 A1 8/2015 Reddy et al.
2016/0097668 A1 4/2016 Vilag

FOREIGN PATENT DOCUMENTS

CN 104897239 A 9/2015
CN 204758082 U 11/2015
CN 105592834 A 5/2016
EP 0149132 5/1989
EP 2676652 12/2013
EP 2997950 A2 3/2016
GB 805539 A * 12/1958 F16C 33/20
GB 2156218 A 10/1985
JP H0678858 3/1994
JP 2007263028 A 10/2007
WO WO2016059409 A2 4/2016

OTHER PUBLICATIONS

Lexor Pedicure Spa User Manual (<http://uspedicurespa.com/resources/lexor/luminous-spa-pedicure-chair-owner-manual.pdf>), Aug. 15, 2016.
Maestro Pedicure Spa Owner's Manual (www.universalcompanies.com/FetchFile.ashx?id=c1571259-e567-4fcc-a079 . . .), Aug. 15, 2016.
ANS Magnet Liner Jet (ALJ) Pedicure Spa Jet—Complete Set (<http://buynailsdirect.com/ans-liner-jet-alj-pedicure-spa-jet-complete-set.html>), Aug. 15, 2016.
Auto-Fill Sensor 2.15 (<https://lexor.com/Store/Product/Auto-Fill-Sensor-2-15>), Aug. 15, 2016.
SpaEquip User Manual (which contains the Sanijet Pipeless Hydrotherapy, Pipeless Whirlpool Foot Bath Owner's Manual for Model: FB2-S115), revised Sep. 2004.
Petra Collection Owner's Manual (which contains instructions for Sanijet—Pipeless System users), last updated Oct. 19, 2004, and copyright 2005.
Hanning document titled "Drain Pumps Synchronous Drain Pumps DPS/DPO," downloaded Aug. 24, 2016.

* cited by examiner

U.S. Patent

May 14, 2019

Sheet 1 of 9

US 10,288,071 B2

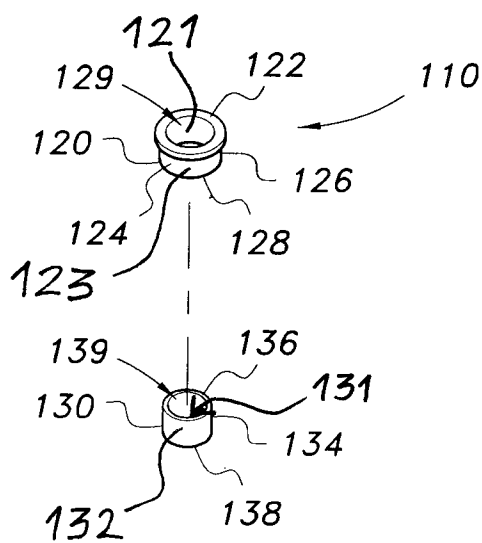


FIG. 1A

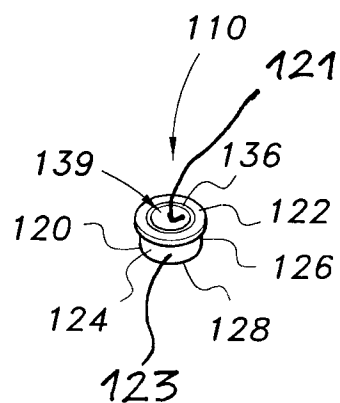


FIG. 1B

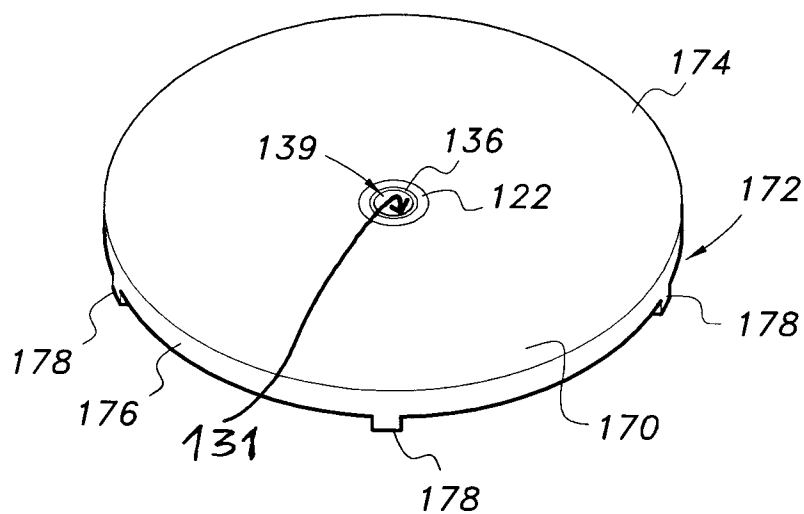


FIG. 2

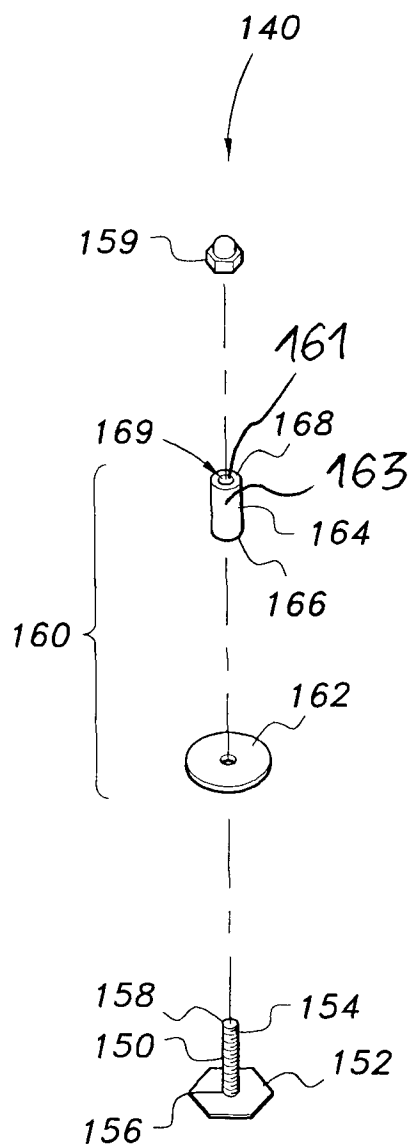


FIG. 3A

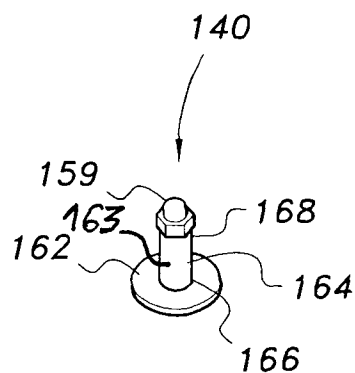


FIG. 3B

U.S. Patent

May 14, 2019

Sheet 3 of 9

US 10,288,071 B2

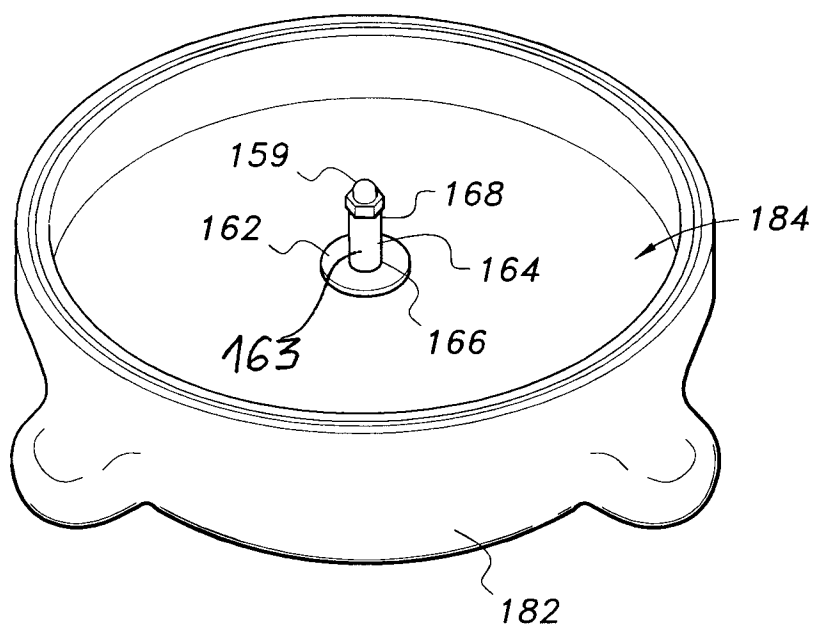


FIG. 4

U.S. Patent

May 14, 2019

Sheet 4 of 9

US 10,288,071 B2

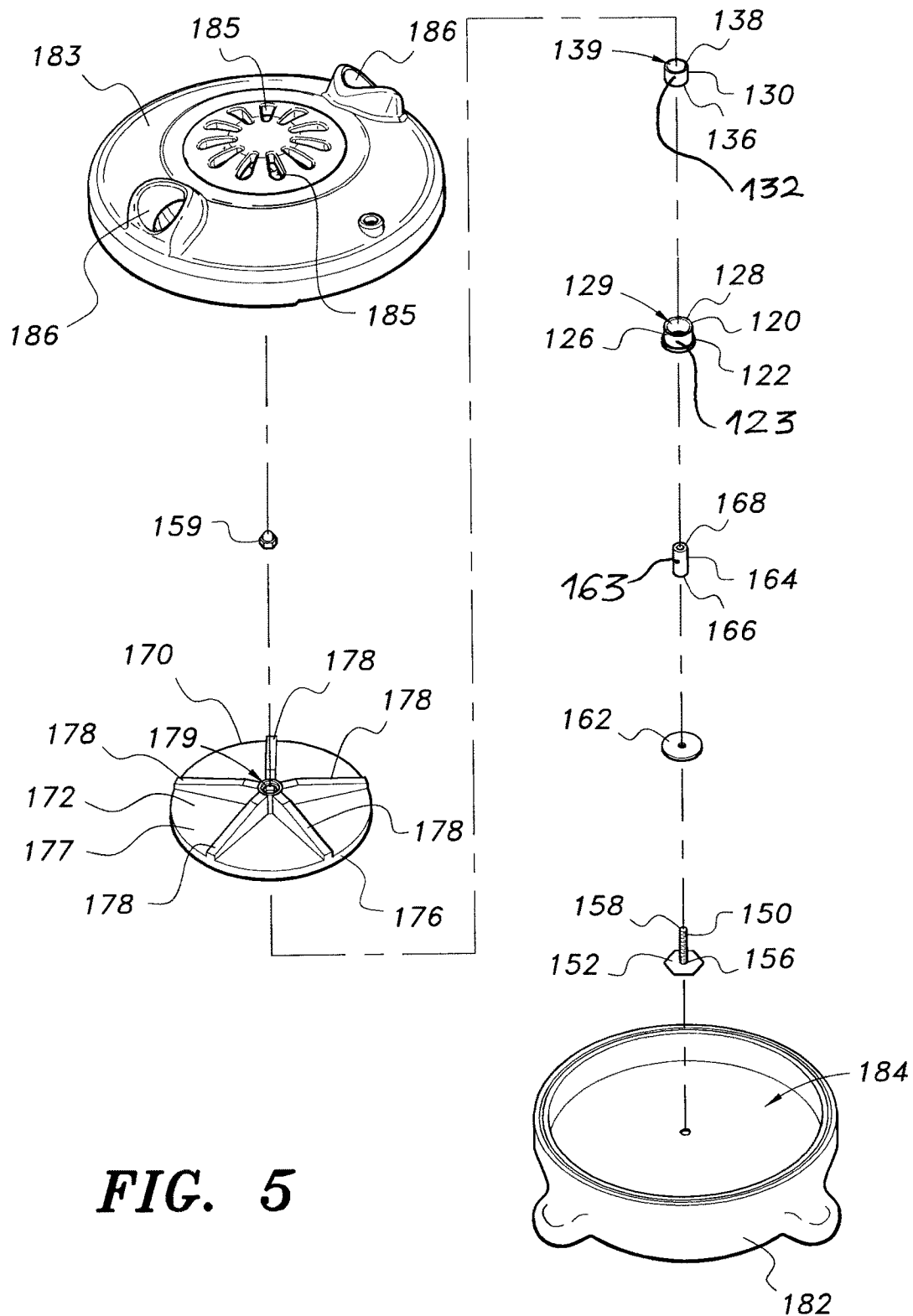


FIG. 5

U.S. Patent

May 14, 2019

Sheet 5 of 9

US 10,288,071 B2

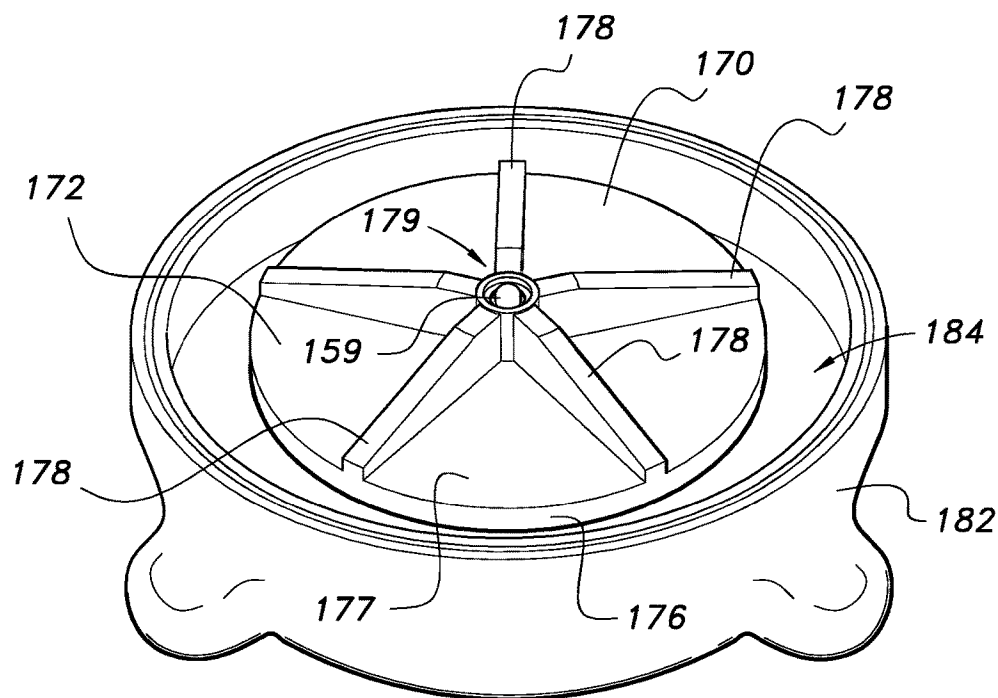


FIG. 6

U.S. Patent

May 14, 2019

Sheet 6 of 9

US 10,288,071 B2

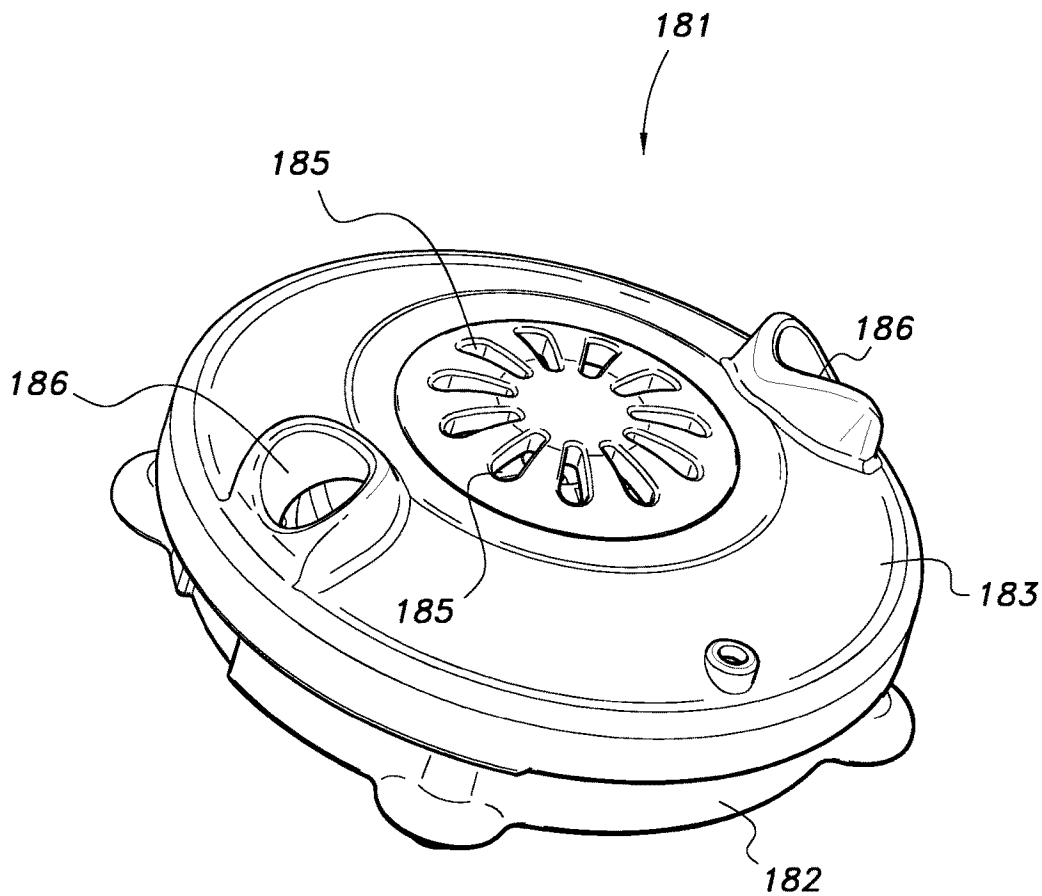


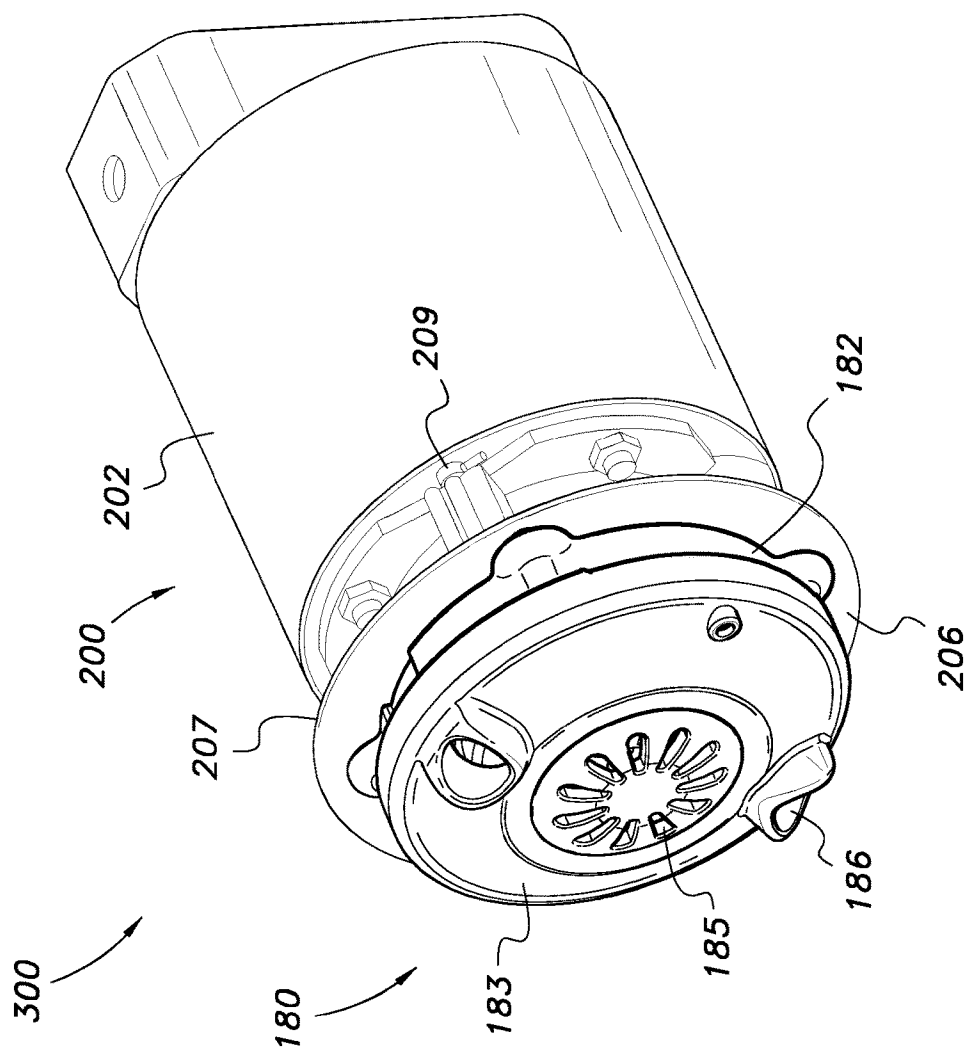
FIG. 7

U.S. Patent

May 14, 2019

Sheet 7 of 9

US 10,288,071 B2



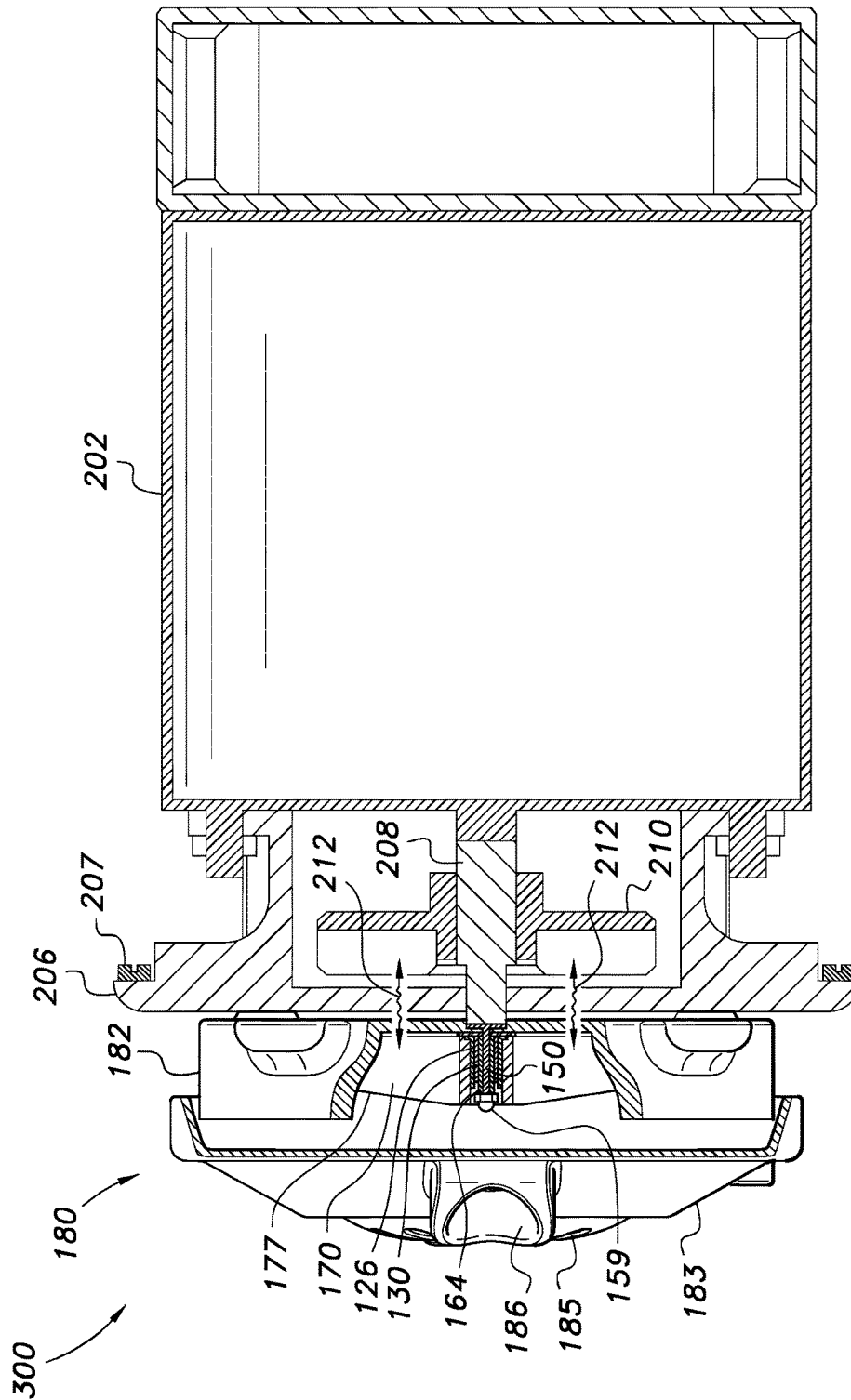


FIG. 9A

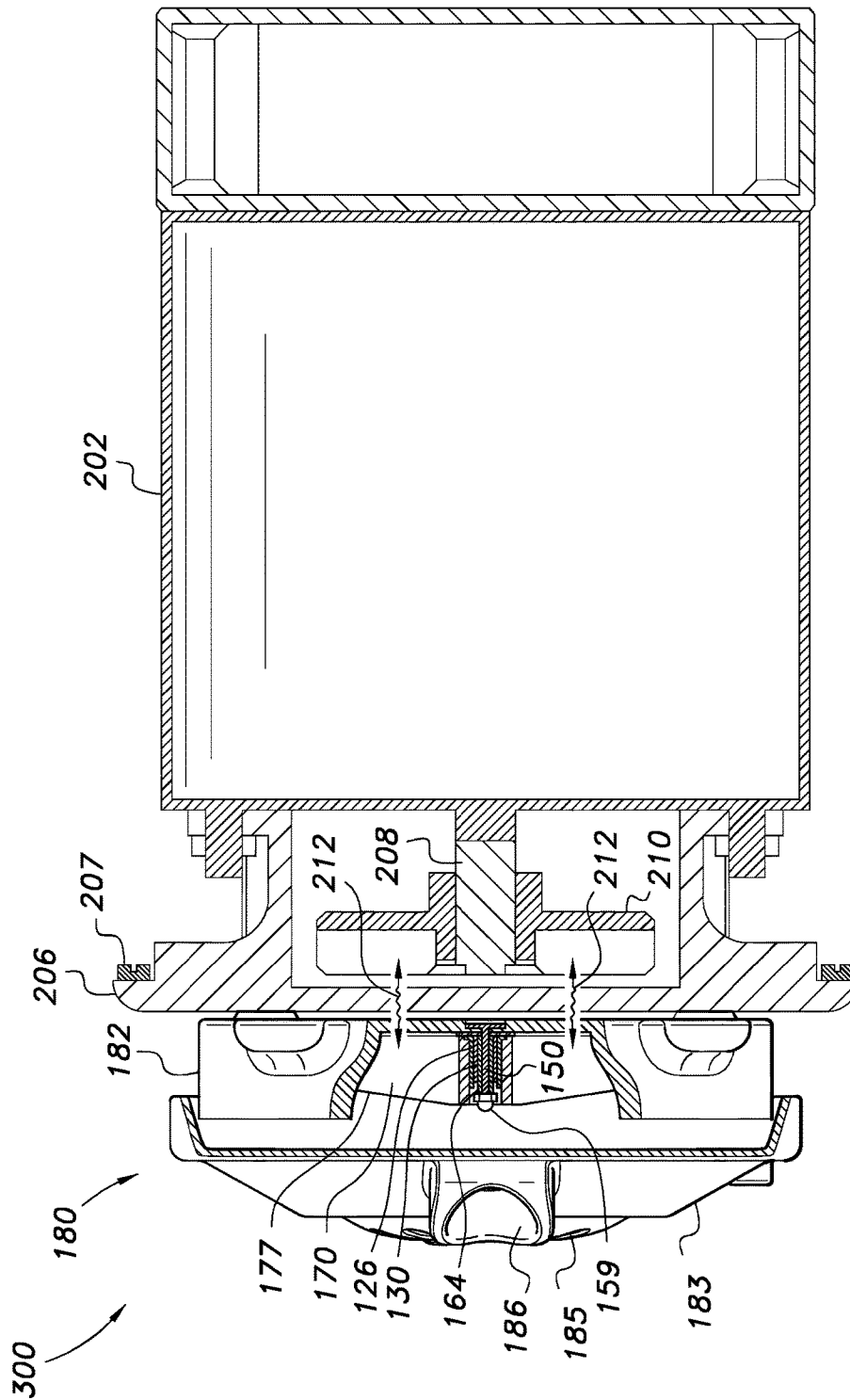


FIG. 9B

US 10,288,071 B2

1

BEARING AND SHAFT ASSEMBLY FOR JET ASSEMBLIES**CROSS-REFERENCE TO RELATED APPLICATIONS**

The present application is a continuation application of and claims the priority benefit of U.S. Nonprovisional patent application Ser. No. 15/854,747, filed Dec. 26, 2017, which is a continuation application of and claims the priority benefit of U.S. Nonprovisional patent application Ser. No. 13/923,364, filed Jun. 20, 2013, and now issued as U.S. Pat. No. 9,926,933 B2, which are incorporated herein by reference in their entirety.

BACKGROUND OF THE INVENTION**Field of the Invention**

The present invention generally relates to spa devices, components, and systems. More specifically, the present invention is directed to an improved bearing and shaft assembly for jet assemblies, to a jet assembly that includes the improved bearing and shaft assembly, to a pump, such as a magnetic coupling-type pump, comprising a motor assembly and a jet assembly that includes the improved bearing and shaft assembly, and to a method for dispensing a fluid using the improved bearing and shaft assembly.

Description of the Related Art

Spa devices, components, and systems are known in the art. Spa devices are used in commercial and recreational settings for hydrotherapy, massage, stimulation, pedicure, and bathing purposes. Typical spa devices include a motor that drives a pump to circulate water from the spa device. In particular, a shaft of the motor is used to directly mount an impeller, which is then used to circulate water into and out of the spa device. Since the motor may not operate wet, a seal or a series of seals may be required to prevent water from entering the motor. The seals will wear to the point where water will enter the motor and consequently, the entering water may cause the motor to burn out. At this point, the motor assembly may be replaced in order to continue operation. This is expensive and may take several hours in which to perform.

Additionally, because typical spa devices have extensive piping systems that are built into the spa device to transport water, the spa devices are traditionally difficult to clean. This results in downtime and complicated maintenance schedules to clean such spa devices. Furthermore, if a spa device has a light source associated with it, to replace or repair such a light source can be time consuming and complicated when the light source is not easily accessible.

In the spa application environment, water is commonly added with certain substances and/or products, such as salt, chemicals, sand, massage lotions, etc. Due to this fact, traditional bearings, such as ball bearings and metal bushings, will not be suitable for a long term and reliable operation. The presence of chemicals and sand, for example, will cause some or many currently available bearings to wear out quicker than normal and result in pump failures.

In addition, for magnetic coupling-type pumps, it is almost impossible to have a perfect alignment between the motor shaft axis and the impeller rotation axis. The imperfect alignment or misalignment will result in high vibration noise.

The present invention overcomes one or more of the shortcomings of the above described spa devices, components, and systems. The Applicant is unaware of inventions

2

or patents, taken either singly or in combination, which are seen to describe the present invention as claimed.

SUMMARY OF THE INVENTION

In one exemplary aspect, the present invention is directed to an improved bearing and shaft assembly for jet assemblies. The improved bearing and shaft assembly comprises a bearing assembly comprising an outer bearing member and an inner bearing member, and a shaft assembly comprising a shaft member, a shaft protection member, and a locking mechanism.

The outer bearing member preferably comprises a ring-like base and a cylindrical body extending upwardly from the ring-like base. The cylindrical body comprises a first end, a second end, and a cavity extending from the first end to the second end. The cavity is dimensioned and configured for receiving the inner bearing member. The outer bearing member is dimensioned and configured for fitting within a cavity of an impeller of a jet assembly.

The inner bearing member comprises a cylindrical body comprising a first end, a second end, and a cavity extending from the first end to the second end of the cylindrical body of the inner bearing member. The cavity of the cylindrical body of the inner bearing member is dimensioned and configured for receiving the shaft member and shaft protection member of the shaft assembly.

The shaft member comprises a base and a cylindrical body extending upwardly from the base of the shaft member. The cylindrical body of the shaft member comprises a first end and a second end. The shaft member is adapted for being secured within a housing of a jet assembly, such as the base of the shaft member being secured centrally within a cavity of the housing of the jet assembly.

The shaft protection member preferably comprises a ring-like base and a cylindrical body extending upwardly from the ring-like base of the shaft protection member. The cylindrical body of the shaft protection member comprises a first end, a second end, and a cavity extending from the first end to the second end of the cylindrical body of the shaft protection member. The cavity of the cylindrical body of the shaft protection member is dimensioned and configured for receiving the cylindrical body of the shaft member. The cylindrical body of the shaft protection member is dimensioned and configured for fitting within the cavity of the cylindrical body of the inner bearing member.

The locking mechanism secures or locks the shaft member and shaft protection member in place during operational use.

In another exemplary aspect, the present invention is directed to a jet assembly that includes the improved bearing and shaft assembly. In addition to the improved bearing and shaft assembly, the jet assembly further includes a housing defining a cavity and comprising at least one inlet aperture disposed about the housing and dimensioned and configured to receive a fluid and at least one outlet aperture disposed about the housing and dimensioned and configured to output the fluid, and an impeller positioned within the cavity defined by the housing and configured to rotate within the cavity when a magnetic pole array from a motor assembly is driven such that rotation of the impeller causes the fluid to flow into the inlet aperture and out the outlet aperture. The jet assembly is adapted for being coupled to a motor assembly.

In an additional exemplary aspect, the present invention is directed to a pump, such as a magnetic coupling-type pump, comprising a motor assembly and a jet assembly that

US 10,288,071 B2

3

includes the improved bearing and shaft assembly. The motor assembly has a motor and a magnetic pole array such that the motor is configured to drive the magnetic pole array. The jet assembly is secured or coupled to the motor assembly. In addition to the improved bearing and shaft assembly, the jet assembly further includes a housing defining a cavity and comprising at least one inlet aperture preferably disposed about the housing and dimensioned and configured to receive a fluid and at least one outlet aperture preferably disposed about the housing and dimensioned and configured to output the fluid, and an impeller positioned within the cavity defined by the housing and configured to rotate within the cavity when the magnetic pole array from the motor assembly is driven such that rotation of the impeller causes the fluid to flow into the inlet aperture and out the outlet aperture.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid using the improved bearing and shaft assembly.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A is a perspective, exploded view of a bearing assembly of an improved bearing and shaft assembly according to the present invention;

FIG. 1B is a perspective, assembly view of the bearing assembly of FIG. 1A;

FIG. 2 is a perspective, assembly view of the bearing assembly of FIG. 1A positioned within a cavity of an impeller;

FIG. 3A is a perspective, exploded view of a shaft assembly of an improved bearing and shaft assembly according to the present invention;

FIG. 3B is a perspective, assembly view of the shaft assembly of FIG. 3A;

FIG. 4 is a perspective, assembly view of the shaft assembly of FIG. 3A positioned relative to a housing (without a front cover) of a jet assembly;

FIG. 5 is a perspective, exploded view of the bearing assembly of FIG. 1A, the shaft assembly of FIG. 3A, and a jet assembly (with a front cover);

FIG. 6 is a perspective, assembly view of the improved bearing and shaft assembly of FIGS. 1A and 3A, and the impeller and housing of the jet assembly (without the front cover) of FIG. 5;

FIG. 7 is a perspective, assembly view of the improved bearing and shaft assembly of FIGS. 1A and 3A, and the impeller and housing of the jet assembly (with the front cover) of FIG. 5;

FIG. 8 is a perspective view of a magnetic coupling-type pump according to the present invention, showing a jet assembly and a motor assembly coupled to one another;

FIG. 9A is a cross-sectional view of the magnetic coupling-type pump of FIG. 8; and

FIG. 9B is a cross-sectional view of another embodiment of a magnetic, coupling-type pump according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another.

It should be understood that the above-attached figures are not intended to limit the scope of the present invention in any way.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGS. 1A-5 and in one exemplary aspect, the present invention is directed to an improved bearing and shaft assembly 100 for jet assemblies 180.

4

The improved bearing and shaft assembly 100 is comprised of a bearing assembly 110 comprising an outer bearing member 120 and an inner bearing member 130, and a shaft assembly 140 comprising a shaft member 150, a shaft protection member 160, and a locking mechanism 159.

As shown in FIGS. 1A, 1B and 2, the outer bearing member 120 and inner bearing member 130 perform as a bearing. The inner bearing member 130 absorbs vibration and noise when in use with other components of a jet assembly 180 or a pump 300, such as a magnetic coupling-type pump 300 and the like.

The outer bearing member 120 includes an inner surface 121, an outer surface 123, a base 122, preferably a ring-like base, and a cylindrical body 124 extending upwardly from the ring-like base 122. The ring-like base 122 has a predetermined thickness. The cylindrical body 124 has a first end 126, a second end 128, and a cavity 129 extending from the first end 126 to the second end 128. As shown in FIGS. 1A, 1B, 2 and 5, the cavity 129 is dimensioned and configured for receiving the inner bearing member 130. Preferably, when in use, the outer bearing member 120 and inner bearing member 130 are closely or tightly positioned relative to one another such that they form an effective seal. As shown in FIGS. 2 and 5, the outer bearing member 120 is dimensioned and configured for fitting, preferably closely or tightly fitting, within a centrally-disposed cavity 179 of an impeller 170, preferably a magnetic impeller and more preferably a planar magnetic impeller, of a jet assembly 180. Preferably and as best shown in FIG. 2, the ring-like base 122 of the outer bearing member 120 and first end 136 of the cylindrical body 134 of the inner bearing member 130 are substantially flush with the rear side 174 of the magnetic impeller 170 when the outer bearing member 120 and inner bearing member 130 are positioned within the centrally-disposed cavity 179 of the magnetic impeller 170. Preferably, the centrally-disposed cavity 179 of the magnetic impeller 170 is dimensioned and configured for effectively receiving the bearing assembly 110 prior to use, and also for effectively retaining the bearing assembly 110 when in use. The outer bearing member 120 is preferably made or manufactured of a plastic material or engineered plastics. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the outer bearing member 120.

The inner bearing member 130 includes an inner surface 131, an outer surface 132, and a cylindrical body 134 having first end 136, a second end 138, and a cavity 139 extending from the first end 136 to the second end 138. As shown in FIGS. 1A, 1B, 2, 5, 9A and 9B, the inner surface 131 of the inner bearing member 130 is preferably generally smooth to work or operate in concert with the shaft protection member 160, which is preferably polished or super smooth on its outer surface 163. As shown in FIGS. 1A, 1B, 2 and 5, the cavity 139 is dimensioned and configured for receiving the shaft member 150 and shaft protection member 160 of the shaft assembly 140. The inner bearing member 130 is preferably made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the inner bearing member 130.

As shown in FIGS. 3A, 3B, 4 and 5, the shaft assembly 140 includes the shaft member 150, the shaft protection member 160, and the locking mechanism 159.

As shown in FIGS. 3A, 3B and 5, the shaft member 150 includes a base 152 and a cylindrical body 154 extending upwardly from the base 152. The cylindrical body 154 has a first end 156 and a second end 158. As best shown in FIG.

US 10,288,071 B2

5

4, the shaft member 150 and shaft protection member 160 are secured within the housing 181, preferably in a central location within a cavity 184 of the housing 181, of the jet assembly 180 via the base 152 of the shaft member 150 being secured to the base 182 of the housing 181. The cylindrical body 154 has a first end 156 and a second end 158. The shaft member 150 is preferably made or manufactured of steel or a metal material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft member 150. Also, the shaft member 150 is preferably made or manufactured as a single piece. It is obvious to one of ordinary skill in the art that the shaft member 150 may be made or manufactured as multiple pieces.

The shaft protection member 160 includes an inner surface 161, an outer surface 163, a base 162, preferably a ring-like base, and a cylindrical body 164 extending upwardly from the ring-like base 162. The cylindrical body 164 has a first end 166, a second end 168, and a cavity 169 extending from the first end 166 to the second end 168. As shown in FIG. 3B, the cavity 169 is dimensioned and configured for receiving the cylindrical body 154 of the shaft member 150. The shaft protection member 160 is preferably made or manufactured of a hard material, such as ceramic or a ceramic-type material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft protection member 160. Also, the shaft protection member 160 is preferably polished or super smooth on its outer surface 163. Further, the shaft protection member 160 is preferably made or manufactured as two pieces. It is obvious to one of ordinary skill in the art that the shaft protection member 160 may be made or manufactured as a single piece.

As shown by FIGS. 3A, 3B, 4-6, 9A and 9B and when in use, the locking mechanism 159 secures or locks the shaft member 150 and shaft protection member 160 in place during operational use. The locking mechanism 159 may be a locking nut that, when in use, is secured onto the second end 158 of the cylindrical body 154 of the shaft member 150.

As shown in FIGS. 2, 5 and 6, the magnetic impeller 170 has a "disc-like" configuration or shape, and includes a front side 172, a rear side 174, a sidewall 176, a circular array of arm members 178 positioned on the front side 172, and the centrally-disposed cavity 179 dimensioned and configured for receiving the outer bearing member 120, inner bearing member 130, shaft member 150, and shaft protection member 160. The centrally-disposed cavity 179 preferably extends from the front side 172 through to the rear side 174. The magnetic impeller 170 is configured to rotate about the shaft member 150 and shaft protection member 160. Preferably, the magnetic impeller 170 is formed in whole or in part of a magnetic pole array 177 that, as discussed below, interacts with magnetic pole array 210 of the motor assembly 200 to rotate the magnetic impeller 170 about the shaft member 150 and shaft protection member 160. As a non-limiting example, the magnetic impeller 170 may contain a magnetic plate within an exterior made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that the magnetic impeller 170 may be other types of magnetic impellers that is known in the art.

In use and as shown in FIGS. 4-6, 9A and 9B, the base 152 of the shaft member 150 and base 162 of the shaft protection member 160 may be secured preferably in a central location within the cavity 184 of the housing 181 of the jet assembly 180 of the magnetic coupling-type pump 300. The bearing assembly 110 may then be positioned in the cavity 179 of the magnetic impeller 170, which can then be positioned within

6

the cavity 184 of the housing 181 of the jet assembly 180. The locking mechanism or nut 159 can then be secured to the second end 158 of the cylindrical body 154 of the shaft member 150 to secure or lock the shaft member 150 and shaft protection member 160 in place during operational use. As best shown FIGS. 9A and 9B, the base 162 of the shaft protection member 160 makes contact with the base 122 or first end of the outer bearing member 120 during operational use.

Referring to FIGS. 1A-7, in another exemplary aspect, the present invention is directed to a jet assembly 180 that includes the improved bearing and shaft assembly 100 (as described above). The jet assembly 180 is adapted for being secured or coupled to a motor assembly 200.

In addition to the improved bearing and shaft assembly 100, the jet assembly 180 further includes a housing 181 and an impeller 170 (as described above), preferably a magnetic impeller and more preferably a planar magnetic impeller.

As shown in FIGS. 4-7, the housing 181 of the jet assembly 180 includes a base 182, a front cover 183, the cavity 184 defined within the base 182 and front cover 183, at least one inlet aperture 185 dimensioned and configured to receive a fluid and preferably disposed on the front cover 183, and at least one outlet aperture 186 dimensioned and configured to output the fluid and preferably disposed on the front cover 183.

The magnetic impeller 170 is adapted for being positioned within the cavity 184 of the housing 181 and configured to rotate within the cavity 184 when a magnetic pole array 210 from the motor assembly 200 is driven such that rotation of the magnetic impeller 170 causes the fluid to flow into the inlet aperture 185 and out the outlet aperture 186.

Preferably when in use and as shown in FIGS. 8, 9A and 9B, the jet assembly 180 is positioned adjacent or in close proximity to the motor assembly 200 when the magnetic pump 300 is fully assembled. In that regard, the jet assembly 180 is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180 is positioned adjacent or in close proximity to the motor assembly 200. Specially, the magnetic pole array 210 of the motor assembly 200 and the magnetic pole array 177 of the jet assembly 180 magnetically couple together the motor assembly 200 and the jet assembly 180.

Moreover, during operation of the motor assembly 200 as shown in FIGS. 9A-9B, the shaft member 150 of the shaft assembly 140 is stationary while the motor shaft member 208 is rotated such that the magnetic field 212 generated by the magnetic pole array 210 of the motor assembly 200 moves or fluctuates in accordance with the rotation of the magnetic pole array 210 of the motor assembly 200. This moving or fluctuating magnetic field 212 moves and/or causes rotation of magnetic pole array 177 of the magnetic impeller 170. Additionally, as discussed in greater detail below, rotation of the magnetic impeller 170 results in fluid being drawn towards the magnetic impeller 170 through inlet apertures 185 and such fluid to be propelled out of the jet assembly 180 through the outlet aperture 186.

Referring to FIGS. 1A-9B, in an additional exemplary aspect, the present invention is directed to a pump 300, preferably a magnetic coupling-type pump, comprising a motor assembly 200 and a jet assembly 180 (as described above) that includes the improved bearing and shaft assembly 100 (as described above). The jet assembly 180 is secured or coupled to the motor assembly 200.

As best shown in FIGS. 9A-9B, the motor assembly 200 includes a motor 202, a magnetic pole array 210 such that the motor 202 is configured to drive the magnetic pole array

US 10,288,071 B2

7

210, a mounting housing member 206, a gasket 207, a motor shaft member 208 that is coupled to the magnetic pole array 210, and a plurality of screws with wing nuts 209 to support the pump mounting. The mounting housing member 206 and gasket 207 preferably enclose all or a substantial portion of the magnetic pole array 210, and help to keep fluids and/or substances away from the motor 202 and magnetic pole array 210 so that contamination and/or damage is reduced or prevented. The magnetic pole array 210 is formed of magnetic material and/or is magnetized in order to generate a magnetic field 212.

In that regard, the motor assembly 200 may include and/or be coupled to a power source (not shown) that enables rotation of the motor shaft member 208. Upon operation of the motor assembly 200, the motor shaft member 208 is rotated such that the magnetic field 212 generated by the magnetic pole array 210 moves or fluctuates in accordance with the rotation of the magnetic pole array 210.

In addition, when the magnetic coupling-type pump 300 is assembled, the jet assembly 180 is positioned adjacent or in close proximity to the mounting housing member 206 of the motor assembly 200. The jet assembly 180 is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180 is positioned adjacent or in close proximity to the mounting housing member 206. The jet assembly 180 and mounting housing member 206 can be secured or coupled to one another by any method and/or device known to one of ordinary skill in the art.

Furthermore, the motor assembly 200 may further include an air channel (not shown), or air channel member (not shown). In that regard, the air channel includes an inlet (not shown) and outlet (not shown). The air channel, in part, enables the jet assembly 180 to produce a jet stream of fluid that includes an air mixture.

Additionally, the motor assembly 200 may further include sensors (not shown). The sensors may be positioned on a front facing surface (not shown), or annular flange, of the mounting housing member 206. The sensors may include electrodes that act as level sensors that sense the level of fluid around the pump 300. If the sensors detect that the level of fluid around the pump 300 is below a predetermined level or value, then the sensors can shut off the pump 300. For example, if pump 300 is being used in a spa application, the sensors can detect the level of fluid in a basin in which the pump 300 is being used. If the fluid level is too low such that continued operation of pump 300 may cause damage to the pump, then sensors send a signal to motor assembly 200 to stop the motor assembly 200 from operating. Therefore, the sensors act as a safety mechanism that prevents the pump 300 from burning out if fluid levels are too low for proper functioning of pump 300.

Although the sensors have been described as being associated with particular aspects of motor assembly 200, it is contemplated that sensors can be associated with other and/or additional portions of motor assembly 200. Additionally, in other embodiments sensors can be associated with jet assembly 180. Furthermore, in other embodiments sensors can be associated with both motor assembly 200 and jet assembly 180. Moreover, although two sensors are shown it is contemplated that one sensor or more than two sensors can be used to detect fluid levels around pump 300.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid using an improved bearing and shaft assembly 100 for a jet assembly 180, the method comprising the steps of:

securing the improved bearing and shaft assembly 100 within a housing 181 of a jet assembly 180,

8

wherein the improved bearing and shaft assembly 100 comprises a bearing assembly 110 and a shaft assembly 140, wherein the bearing assembly 110 comprises an outer bearing member 120 and an inner bearing member 130,

wherein the shaft assembly 140 comprises a shaft member 150, a shaft protection member 160, and a locking mechanism 159,

wherein the outer bearing member 120 comprises an inner surface 121, an outer surface 123, and a cylindrical body 124 comprising a first end 126, a second end 128, and a cavity 129 extending from the first end 126 to the second end 128, wherein the cavity 129 of the cylindrical body 124 is dimensioned and configured for receiving the inner bearing member 130, wherein the outer bearing member 120 is dimensioned and configured for fitting within a cavity 179 of an impeller 170 of the jet assembly 180,

wherein the inner bearing member 130 comprises an inner surface 131, an outer surface 132, and a cylindrical body 134 comprising a first end 136, a second end 138, and a cavity 139 extending from the first end 136 to the second end 138 of the cylindrical body 134 of the inner bearing member 130,

wherein the shaft member 150 comprises a cylindrical body 154 comprising a first end 156 and a second end 158,

wherein the shaft protection member 160 comprises an inner surface 161, an outer surface 163, and a cylindrical body 164 comprising a first end 166, a second end 168, and a cavity 169 extending from the first end 166 to the second end 168 of the cylindrical body 164 of the shaft protection member 160, wherein the cavity 169 of the cylindrical body 164 of the shaft protection member 160 is dimensioned and configured for receiving the shaft member 150, wherein the shaft protection member 160 is dimensioned and configured for fitting within the cavity 139 of the cylindrical body 134 of the inner bearing member 130, and

wherein the locking mechanism 159 secures or locks the shaft member 150 and shaft protection member 160 in place during operational use;

causing rotation of the impeller 170 positioned within a cavity 184 defined by the housing 181 of the jet assembly 180;

receiving the fluid through at least one input aperture 185 disposed about the housing 181 of the jet assembly 180;

disturbing the fluid with the rotating impeller 170; and

outputting the fluid through at least one output aperture 186 disposed about the housing 181 of the jet assembly 180.

In addition, the method above may further include: wherein the outer bearing member 120 further comprises a base 122 comprising a cavity, wherein the cylindrical body 124 of the outer bearing member 120 extends upwardly from the base 122, wherein the cavity of the base 122 is dimensioned and configured for receiving the inner bearing member 130,

wherein the shaft member 150 further comprises a base 152, wherein the cylindrical body 154 of the shaft member 150 extends upwardly from the base 152 of the shaft member 150, and

wherein the shaft protection member 160 further comprises a base 162 comprising a cavity, wherein the cylindrical body 164 of the shaft protection member 160 extends upwardly from the base 162 of the shaft protection member 160, and wherein the cavity of said base 162 is dimensioned and configured for receiving the shaft member 150.

Additionally, the method above may further include: wherein the jet assembly 180 is adapted for being secured to a pump 300, such as a magnetic coupling-type pump 300 and the like, wherein the impeller 170 is a magnetic impeller 170 comprising a magnetic pole array 177, wherein a motor

US 10,288,071 B2

9

assembly 200 of the magnetic coupling-type pump 300 comprises a motor 202, a magnetic pole array 210, and a shaft member 208 adapted for being rotated such that a magnetic field 212 generated by the magnetic pole array 210 of the motor assembly 200 moves or fluctuates in accordance with the rotation of the magnetic pole array 210 of the motor assembly 200, wherein the motor 202 drives the magnetic pole array 210 of the motor assembly 200, wherein the magnetic field 212 moves and/or causes rotation of the magnetic pole array 177 of the magnetic impeller 170, and wherein rotation of the magnetic impeller 170 results in the fluid being drawn towards the magnetic impeller 170 through the at least one inlet aperture 185 and the fluid to be propelled out of the jet assembly 180 through the at least one outlet aperture 186.

Further, the method above may further include: wherein the outer bearing member 120 is manufactured of a plastic material or engineered plastics, wherein the inner bearing member 130 is manufactured of rubber or a rubber-like material, wherein the shaft member 150 is manufactured of steel or a metal material, and wherein the shaft protection member 160 is manufactured of a hard material.

Furthermore, the method above may further include any of the parts, steps and/or details that have been described in the above paragraphs with regard to the improved bearing and shaft assembly 100, jet assemblies 180, and pumps 300, such as magnetic coupling-type pumps 300 and the like.

It is to be understood that the present invention is not limited to the embodiments described above or as shown in the attached figures, but encompasses any and all embodiments within the spirit of the invention.

What is claimed is:

1. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type fluid pump for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:

a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,

wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,

wherein said bearing assembly comprises at least one bearing member,

wherein said at least one bearing member is dimensioned and configured such that a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,

wherein said shaft assembly comprises said shaft member and said shaft protection member,

wherein said shaft member extends through said inner surface of said jet assembly housing,

wherein said shaft protection member's base further comprises a bottom surface, and a diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet

10

assembly housing, and wherein said shaft protection member is manufactured of a hard material;

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member; and

a locking mechanism for securing said jet assembly housing to said mounting housing member to prevent rotation of said jet assembly housing during operational use.

2. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.

3. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.

4. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft member is manufactured of steel or a metal material.

5. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft protection member is manufactured of a ceramic material.

6. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said at least one bearing member is an outer bearing member and an inner bearing member, wherein said outer bearing member is manufactured of a plastic material, wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein said shaft member is manufactured of steel or a metal material.

7. The combination jet assembly and mounting housing member apparatus according to claim 6, wherein said shaft protection member is manufactured of a ceramic material.

8. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said combination jet assembly and mounting housing member apparatus is adapted for being coupled to the motor assembly to form a magnetic coupling-type pump, wherein said magnetic impeller comprises a magnetic pole array, wherein said motor shaft member is adapted for being rotated such that a magnetic field generated by said magnetic pole array plate of said motor assembly moves or fluctuates in accordance with the rotation of said magnetic pole array plate of said motor assembly, wherein said motor drives said magnetic pole array plate, wherein said magnetic field moves and/or causes rotation of said magnetic pole array of said magnetic impeller, and wherein rotation of said magnetic impeller results in the fluid being drawn towards said magnetic impeller through said at least one inlet aperture and the fluid to be propelled out of said jet assembly through said at least one outlet aperture.

9. The combination jet assembly and mounting housing member apparatus according to claim 1,

wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member, wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said

US 10,288,071 B2

11

second end of said body of said outer bearing member, wherein said cavity of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller, wherein said inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.

10. A magnetic coupling-type fluid pump used for dispensing a fluid to an environment in manicure and pedicure industries, said fluid pump comprising:

- a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;
- a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller, wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,
- wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture,
- wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,
- wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,
- wherein said bearing assembly comprises at least one bearing member,
- wherein said at least one bearing member is dimensioned and configured such that a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,
- wherein said shaft assembly comprises said shaft member and said shaft protection member,
- wherein said shaft member extends through said inner surface of said jet assembly housing, and
- wherein said shaft protection member's base further comprises a bottom surface, and a diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material; and
- a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,
- wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.

12

11. The fluid pump according to claim **10**, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.

12. The fluid pump according to claim **10**, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.

13. The fluid pump according to claim **10**, wherein said shaft member is manufactured of steel or a metal material.

14. The fluid pump according to claim **10**, wherein said shaft protection member is manufactured of a ceramic material.

15. The fluid pump according to claim **10**, wherein said at least one bearing member is an outer bearing member and an inner bearing member, wherein said outer bearing member is manufactured of a plastic material, wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein said shaft member is manufactured of steel or a metal material.

16. The fluid pump according to claim **15**, wherein said shaft protection member is manufactured of a ceramic material.

17. The fluid pump according to claim **10**, wherein said magnetic impeller comprises a magnetic pole array, wherein said motor assembly further comprises a magnetic pole array and a motor shaft member adapted for being rotated such that a magnetic field generated by said magnetic pole array of said motor assembly moves or fluctuates in accordance with the rotation of said magnetic pole array of said motor assembly, wherein said motor drives said magnetic pole array of said motor assembly, wherein said magnetic field moves and/or causes rotation of said magnetic pole array of said magnetic impeller, and wherein rotation of said magnetic impeller results in the fluid being drawn towards said magnetic impeller through said at least one inlet aperture and the fluid to be propelled out of said jet assembly through said at least one outlet aperture.

18. The fluid pump according to claim **10**,

wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member, wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said second end of said body of said outer bearing member, wherein said cavity of said body of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller,

wherein said inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and

wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.

19. The combination jet assembly and mounting housing member apparatus according to claim **1**, wherein said diam-

US 10,288,071 B2

13

eter of said base of said shaft protection member is larger than or equal to an outer diameter of said at least one bearing member.

20. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft protection member further comprises a body extending upwardly from said base of said shaft protection member, wherein said body of said shaft protection member comprises a first end, a second end, and a cavity extending from said first end to said second end of said body of said shaft protection member, wherein said cavity of said body of said shaft protection member is dimensioned and configured for receiving said body of said shaft member, and wherein said body of said shaft protection member is dimensioned and configured for fitting within said cavity of said at least one bearing member.

21. The combination jet assembly and mounting housing member apparatus according to claim 20, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.

22. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said mounting housing member further comprises at least one mounting leg.

23. The combination jet assembly and mounting housing member apparatus according to claim 22, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.

24. The combination jet assembly and mounting housing member apparatus according to claim 20, further comprising a locking mechanism for locking said shaft protection member and said shaft member in place during operational use.

25. The fluid pump according to claim 10, wherein said base of said shaft protection member makes contact with said first end of said at least one bearing member during operational use.

26. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type fluid pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:

a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,

wherein said jet assembly housing comprising an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,

wherein said bearing assembly comprises an outer bearing member and an inner bearing member,

wherein said outer bearing member has a diameter and is dimensioned and configured such that a first end of said

14

outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use,

wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use,

wherein said shaft assembly comprises said shaft member and a shaft protection member,

wherein said shaft member extends through an inner surface of a base of said jet assembly housing,

wherein said shaft protection member's base further comprises a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing,

wherein said shaft protection member is manufactured of a hard material, and

wherein said diameter of said base of said shaft protection member is greater than or equal to said diameter of said outer bearing member; and

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.

27. The combination jet assembly and mounting housing member apparatus according to claim 26,

wherein said shaft protection member further comprises a body comprising a first end, a second end, and a cavity extending from said first end to said second end of said body of said shaft protection member, wherein said body of said shaft protection member extends upwardly from said base of said shaft protection member, wherein said cavity of said body of said shaft protection member is dimensioned and configured for receiving said body of said shaft member, and wherein said body of said shaft protection member is dimensioned and configured for fitting within said cavity of said inner bearing member, said cavity of said outer bearing member, and said cavity of said magnetic impeller, and wherein, when in operational use, said body of said outer bearing member, said body of said inner bearing member, said body of said shaft protection member, and said body of said shaft member are all positioned within said cavity of said magnetic impeller.

28. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said shaft protection member is manufactured of a ceramic material.

29. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said shaft member is manufactured of steel or a metal material.

30. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.

* * * * *

**LURACO’S FIRST AMENDED INFRINGEMENT CONTENTIONS RE:
US10288071**

1. Defendant/Counter Plaintiff Luraco Health & Beauty, LLC (“Luraco”), hereby provide its first amended infringement contentions against Plaintiffs/Counter Defendants Lexor Inc., Lexor Manufacturing LLC (“Lexor Mfg.”), and Ecojet Inc. (“Ecojet”). .
2. Luraco alleges that Lexor, Inc, and Lexor Mfg sell products made by Lexor Mfg. and Ecojet.
3. The EcoJet II Magnetic Drive (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Whirlpool Magnetic Jet System (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Magnetic Wet-End (aka the “Ecojet Universal 3.5 Shafted”), Ecojet MD 3.0 Shafted, and Ecojet MD 3.0 Shafted (with motor and mounting housing) are manufactured and sold by Lexor Manufacturing, LLC, which also is believed to licenses use of its patents to Ecojet.
4. Faithful snapshots of the infringing products are shown below:

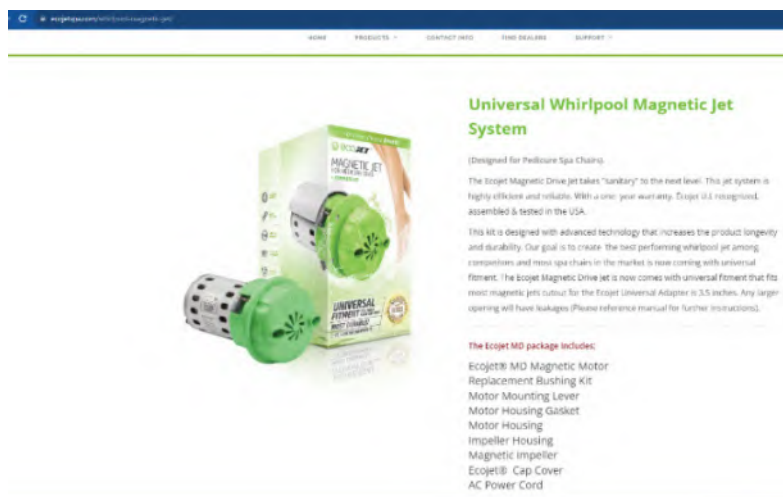


Image from Exhibit 15 of Second Amended Answer

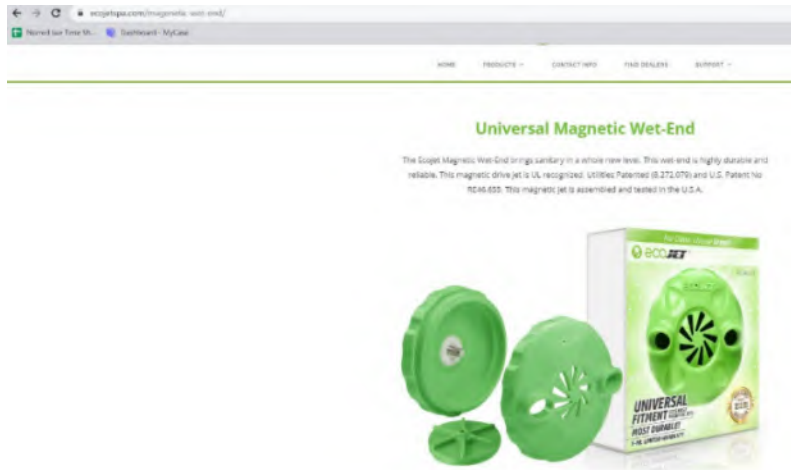


Image From Exhibit 15 of Second Amended Answer

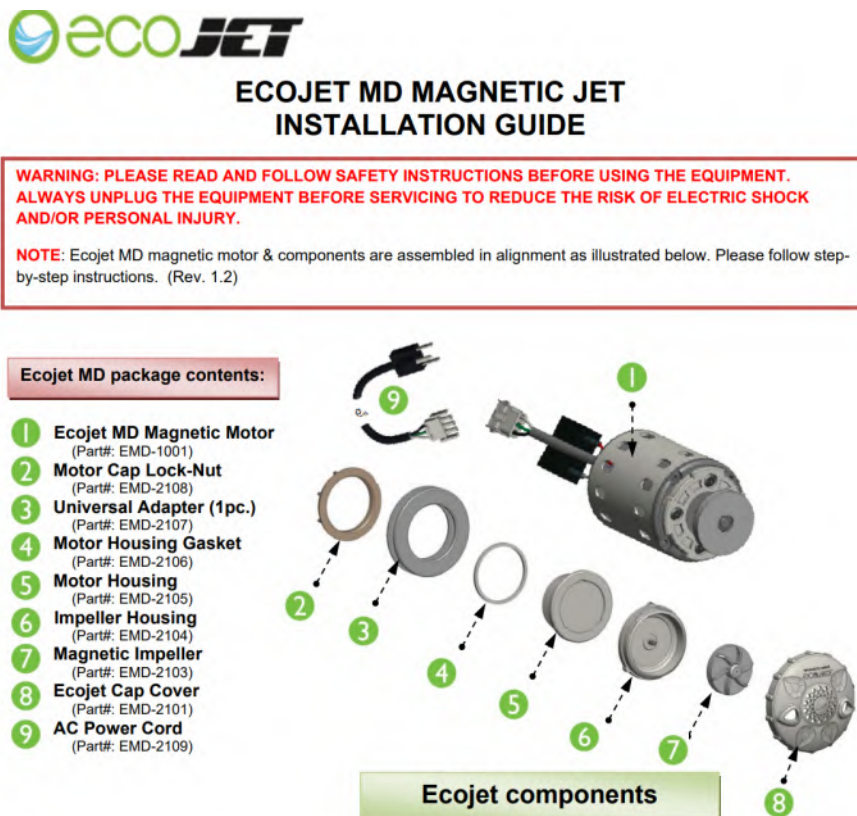


Image from Exhibit 11 of Second Amended Answer

1. The charts showing infringement of US 10,288,071 are attached as Exhibit 2a. Luraco may supplement or amend this set of contentions based on further analysis.

US 10,288,071 Claim Language	Evidence of Infringement of Ecojet MD 3.0 (Shafted)
<p>1. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,</p>	<p>As shown in Fig. 8(1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing.</p>
<p>b) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,</p>	<p>As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, one inlet aperture, and one outlet aperture.</p>
<p>c) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,</p>	<p>As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.</p>
<p>d) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,</p>	<p>Again, referring to Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.</p>
<p>e) wherein said bearing assembly comprises at least one bearing member,</p>	<p>As shown in Fig. 12(5), 13(5-7), and 14(8) the bearing assembly comprises at least one bearing member.</p>
<p>f) wherein said at least one bearing member is dimensioned and configured such that a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,</p>	<p>As shown in Fig. 8(6), 12(1-6), and 13(1-10) , at least one bearing member is dimensioned and configured such that a first end of at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use.</p>
<p>g) wherein said shaft assembly comprises said shaft member and said shaft protection member,</p>	<p>As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises the shaft member and the shaft protection member.</p>
<p>h) wherein said shaft member extends through said inner surface of said jet assembly housing,</p>	<p>As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.</p>
<p>i) wherein said shaft protection member's base further comprises a bottom surface, and a diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material;</p>	<p>As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member's base further comprises a bottom surface, and a diameter, wherein base of shaft protection member is positioned between bearing assembly and base of jet assembly housing. Shaft protection member is manufactured of a ceramic (hard material).</p>

j) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
k) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member; and	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
l) a locking mechanism for securing said jet assembly housing to said mounting housing member to prevent rotation of said jet assembly housing during operational use.	As shown in Fig. 10(1-4 and 6) and 11(4) a locking mechanism for securing the jet assembly housing to the mounting housing member to prevent rotation of the jet assembly housing during operational use.
2. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 13(6) the outer bearing member is manufactured of plastic material.
3. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.	As shown in Fig. 13(7) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.
4. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3) the shaft member is of steel or a metal material.
5. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 12(4) and 13(2) the shaft protection member is manufactured of a ceramic or ceramic-type material.
6. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said at least one bearing member is an outer bearing member and an inner bearing member, wherein said outer bearing member is manufactured of a plastic material, wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3 and 5-7) an outer bearing member and an inner bearing member, wherein outer bearing member is manufactured of a plastic material, wherein inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein shaft member is manufactured of steel or a metal material.
7. The combination jet assembly and mounting housing member apparatus according to claim 6, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 12(4) and 13(2) the shaft protection member is manufactured of a ceramic material.
8. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said combination jet assembly and mounting housing member apparatus is adapted for being coupled to the motor assembly to form a magnetic coupling-type pump, wherein said magnetic impeller comprises a magnetic pole array, wherein said motor shaft member is adapted for being rotated such that a magnetic field generated by said magnetic pole array plate of said motor assembly moves or fluctuates in accordance with the rotation of said magnetic pole array plate of said motor assembly, wherein said motor drives said magnetic pole array plate, wherein said magnetic field moves and/or causes rotation of said magnetic pole array of said magnetic impeller, and wherein rotation of said magnetic impeller results in the fluid being drawn towards said magnetic impeller through said at least one inlet aperture and the fluid to be propelled out of said jet assembly through said at least one outlet aperture.	As shown in Fig. 5(1), 6(1 and 3), 7(1-4), 8(6-7), 9(1-3), 14(5), 15(1, 6-7, and 10), and 16(3-6) the jet assembly is adapted to couple to the motor assembly. The magnetic impeller comprises a magnetic pole array, the motor assembly comprises a motor, a magnetic pole array, and a motor shaft member adapted for being rotated such that the magnetic field generated by the magnetic pole array of the motor assembly rotates the magnetic impeller. This rotation results in the fluid being drawn to the impeller through the inlet aperture and be propelled out of the jet assembly through the outlet aperture.

<p>9. The combination jet assembly and mounting housing member apparatus according to claim 1,</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member,</p>	<p>As shown in Fig. 13(5-7) the bearing assembly comprises an outer bearing member and an inner bearing member.</p>
<p>b) wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said second end of said body of said outer bearing member, wherein said cavity of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller,</p>	<p>As shown in Fig. 13(4-11) the outer bearing member comprises a base comprising a cavity, wherein the body of the outer bearing member extends upwardly from the base of the outer bearing member, and the cavity the outer bearing member is dimensioned and configured for receiving the inner bearing member. The outer bearing member is dimensioned and configured for fitting within cavity of magnetic impeller.</p>
<p>c) wherein said inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and</p>	<p>As shown in Fig. 13(4-11) the inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from first end of body of inner bearing member to second end of body of inner bearing member, wherein inner bearing member is dimensioned and configured for fitting within cavity of body of outer bearing member and within cavity of magnetic impeller.</p>
<p>d) wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.</p>	<p>As shown in Fig. 13(5-7 and 11) the outer bearing member and inner bearing member are positioned adjacent to one another and are aligned axially with one another during operational use.</p>
<p>10. A magnetic coupling-type fluid pump used for dispensing a fluid to an environment in manicure and pedicure industries, said fluid pump comprising:</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;</p>	<p>As shown in Fig. 7(1-3) the motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.</p>
<p>b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller,</p>	<p>As shown in Fig. 8(1 and 6) and 12(1-2 and 5) the jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller.</p>
<p>c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,</p>	<p>As shown in Fig. 6(3), 7(1-4), 8(6-7), 9(1-3), 15(7), and 16(4) the magnetic plate that mounted on the motor shaft and magnetic impeller rotate on a same axis during operation.</p>
<p>d) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture,</p>	<p>As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture.</p>

e) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and allows the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
g) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 12(5), 13(5-7), and 14(8) the bearing assembly comprises an outer bearing member and a sleeve-type, inner bearing member.
h) wherein said at least one bearing member is dimensioned and configured such that a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,	As shown in Fig. 8(6), 12(1-6), and 13(1-10) the outer bearing member is dimensioned and configured such that first end of outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use.
i) wherein said shaft assembly comprises said shaft member and said shaft protection member,	As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises the shaft member and the shaft protection member.
j) wherein said shaft member extends through said inner surface of said jet assembly housing, and	As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.
k) wherein said shaft protection member's base further comprises a bottom surface, and a diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material; and	As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member's base comprises a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing, and wherein the shaft protection member is manufactured of a ceramic (hard material).
l) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries.
m) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while the motor assembly is secured to the bottom surface of the mounting housing member.
11. The fluid pump according to claim 10, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 13(6) the outer bearing member is made of plastic material.
12. The fluid pump according to claim 10, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.	As shown in Fig. 13(7) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.
13. The fluid pump according to claim 10, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3) the shaft member is of steel or a metal material.
14. The fluid pump according to claim 10, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 12(4) and 13(2) the shaft protection member is manufactured of a ceramic material.
15. The fluid pump according to claim 10, wherein said at least one bearing member is an outer bearing member and an inner bearing member, wherein said outer bearing member is manufactured of a plastic material, wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3 and 5-7) the at least one bearing member is an outer bearing member and an inner bearing member, wherein outer bearing member is manufactured of a plastic material, wherein inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein shaft member is manufactured of steel or a metal material.
16. The fluid pump according to claim 15, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 12(4) and 13(2) the shaft protection member is manufactured of a ceramic material.

<p>17. The fluid pump according to claim 10, wherein said magnetic impeller comprises a magnetic pole array, wherein said motor assembly further comprises a magnetic pole array and a motor shaft member adapted for being rotated such that a magnetic field generated by said magnetic pole array of said motor assembly moves or fluctuates in accordance with the rotation of said magnetic pole array of said motor assembly, wherein said motor drives said magnetic pole array of said motor assembly, wherein said magnetic field moves and/or causes rotation of said magnetic pole array of said magnetic impeller, and wherein rotation of said magnetic impeller results in the fluid being drawn towards said magnetic impeller through said at least one inlet aperture and the fluid to be propelled out of said jet assembly through said at least one outlet aperture.</p>	<p>As shown in Fig. 5(1), 6(1 and 3), 7(1-4), 8(6-7), 9(1-3), 14(5), 15(1, 6-7, and 10), and 16(3-6) the jet assembly is adapted to couple to the motor assembly. The magnetic impeller comprises a magnetic pole array, wherein motor assembly further comprises a magnetic pole array and a motor shaft member adapted for being rotated such that a magnetic field generated by magnetic pole array of motor assembly moves or fluctuates in accordance with the rotation of magnetic pole array of motor assembly, wherein motor drives magnetic pole array of motor assembly, wherein said magnetic field moves and/or causes rotation of magnetic pole array of magnetic impeller, and wherein rotation of magnetic impeller results in the fluid being drawn towards magnetic impeller through at least one inlet aperture and the fluid to be propelled out of jet assembly through at least one outlet aperture.</p>
<p>18. The fluid pump according to claim 10,</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member,</p>	<p>As shown in Fig. 13(5-7) the bearing assembly comprises an outer bearing member and an inner bearing member.</p>
<p>b) wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said second end of said body of said outer bearing member, wherein said cavity of said body of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller,</p>	<p>As shown in Fig. 13(4-11) the outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from first end of body of outer bearing member to second end of body of outer bearing member, wherein cavity of body of body of outer bearing member is dimensioned and configured for receiving inner bearing member, and wherein outer bearing member is dimensioned and configured for fitting within cavity of magnetic impeller.</p>
<p>c) wherein said inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and</p>	<p>As shown in Fig. 13(4-11) the inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from first end of body of inner bearing member to second end of body of inner bearing member, wherein inner bearing member is dimensioned and configured for fitting within cavity of body of outer bearing member and within cavity of magnetic impeller.</p>
<p>d) wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.</p>	<p>As shown in Fig. 13(5-7 and 11) the outer bearing member and inner bearing member are positioned adjacent to one another and are aligned axially with one another in operational use.</p>
<p>19. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said diameter of said base of said shaft protection member is larger than or equal to an outer diameter of said at least one bearing member.</p>	<p>The Ecojet MD 3.0 was previously for sale on the Lexor website Se Fig ##. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at on SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 5</p>
<p>21. The combination jet assembly and mounting housing member apparatus according to claim 20, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.</p>	<p>As shown in Fig. 13(7) at least a portion of at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.</p>

25. The fluid pump according to claim 10, wherein said base of said shaft protection member makes contact with said first end of said at least one bearing member during operational use.	As shown in Fig. 8(6), 12(1 and 3-6), and 13(2-6 and 10) the base of said shaft protection member makes contact with first end of at least one bearing member during operational use.
26. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type fluid pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:	The Ecojet MD 3.0 was previously for sale on the Lxor website Se Fig ##. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html . See Fig 4. Additionally it is for sale at on SpaSalon.us at https://www.spasalon.us/spa-parts/ecojet-magnetic-drive-jet.html . See Fig 5
a) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,	As shown in Fig. 8(1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.
b) wherein said jet assembly housing comprising an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, one inlet aperture, and one outlet aperture.
c) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
d) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
e) wherein said bearing assembly comprises an outer bearing member and an inner bearing member,	As shown in Fig. 13(5-7) the bearing assembly comprises an outer bearing member and an inner bearing member.
f) wherein said outer bearing member has a diameter and is dimensioned and configured such that a first end of said outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use,	As shown in Fig. 8(6), 12(1-6), and 13(1-10) the outer bearing member has a diameter and is dimensioned and configured such that a first end of the outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use.
g) wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use,	As shown in Fig. 13(7) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.
h) wherein said shaft assembly comprises said shaft member and a shaft protection member,	As shown in Fig. 12(2-4) and 12(1-3) the shaft assembly comprises the shaft member and the shaft protection member.
i) wherein said shaft member extends through an inner surface of a base of said jet assembly housing,	As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.
j) wherein said shaft protection member's base further comprises a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing,	As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member's base further comprises a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing.
k) wherein said shaft protection member is manufactured of a hard material, and	As shown in Fig. 12(4) and 13(2) the shaft protection member is manufactured of ceramic (hard material).
l) wherein said diameter of said base of said shaft protection member is greater than or equal to said diameter of said outer bearing member; and	As shown in Fig. 19(1-2) the diameter shaft protection member is greater than or equal to the diameter of the outer bearing member.

m) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
n) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
28. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 12(4) and 13(2) the shaft protection member is manufactured of a ceramic material.
29. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3) the shaft member is manufactured of steel or a metal material.
30. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.	As shown in Fig. 8(6), 12(1 and 3-6), and 13(2-6 and 10) the base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.

Figures for the Ecojet MD 3.0 **(Shafted Model)**

ECO magnetic drive jet

Option - complete set (wet cover + dry motor)



FREE
SHIPPING
continental US only

<https://ecojetspa.com/product/ecojet-md-magnetic-jet-set/>



HOME

PRODUCTS ▾

CONTACT INFO

FIND DEALERS

SUPPORT ▾



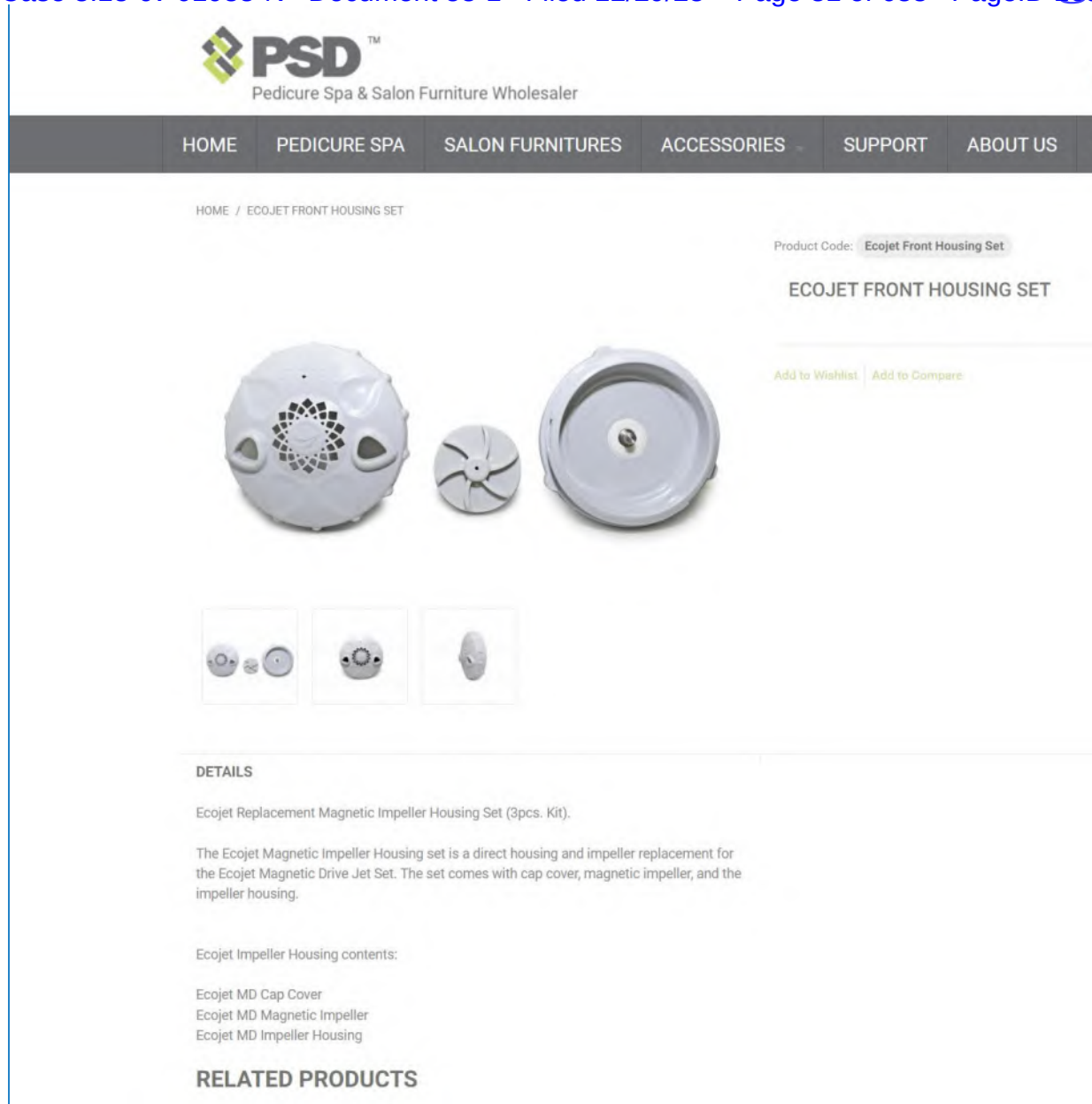
Ecojet Magnetic Drive Jet Set (Retail)

\$199.00

Ecojet Magnetic Whirlpool Motor (Design for Pedicure Spa Chair).

The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized, Utilities Patented (8,272,079) and U.S. Patent No RE46,655. This magnetic jet is assembled and tested in the U.S.A.

This kit is design to fit most spa chairs in the market. The Ecojet Magnetic Drive Jet will fit the standard 3 inch diameter cut out



SpaSalon.us
wholesale

Search products [» advanced search](#)

[PEDICURE CHAIRS](#) [NAIL](#) [HAIR](#) [SPA](#) [DECOR](#) [PARTS](#) [SUPPLIES](#) [PACKAGE DEALS](#)

[Home](#) / [Spa Parts](#) / [ECO magnetic jet - old](#)

ECO magnetic jet - old


★★★★★ [7 reviews](#) [Write a review](#)

Option :
- select -

make your selection, price will show

Faster shipping :
- select -

Price in points **€** : 5650 points



[Description](#) [Email](#) [Reviews 7](#) [Shipping & Warranty](#) [Downloads](#) [How to](#) [Video gallery](#)

ECO magnetic jet - old

Ecojet Impeller Housing contents:

- Ecojet MD Cap Cover
- Ecojet MD Magnetic Impeller
- Ecojet MD Impeller Housing

Ecojet Replacement Magnetic Whirlpool Motor.

- The Ecojet Replacement Magnetic Whirlpool Motor comes with a two-year warranty. We assemble and test the motor in the U.S.A.
- This motor has an internal cooling system to prevent overheating. This is a direct motor replacement for the Ecojet Magnetic Drive Jet Set.

The Ecojet MD package contents:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter (2pcs.)
- Motor Housing Gasket
- Motor Housing (3.5 inches)
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card (2pcs.)

2. Mounting Housing (configured to mount to wall of pedicure basin)

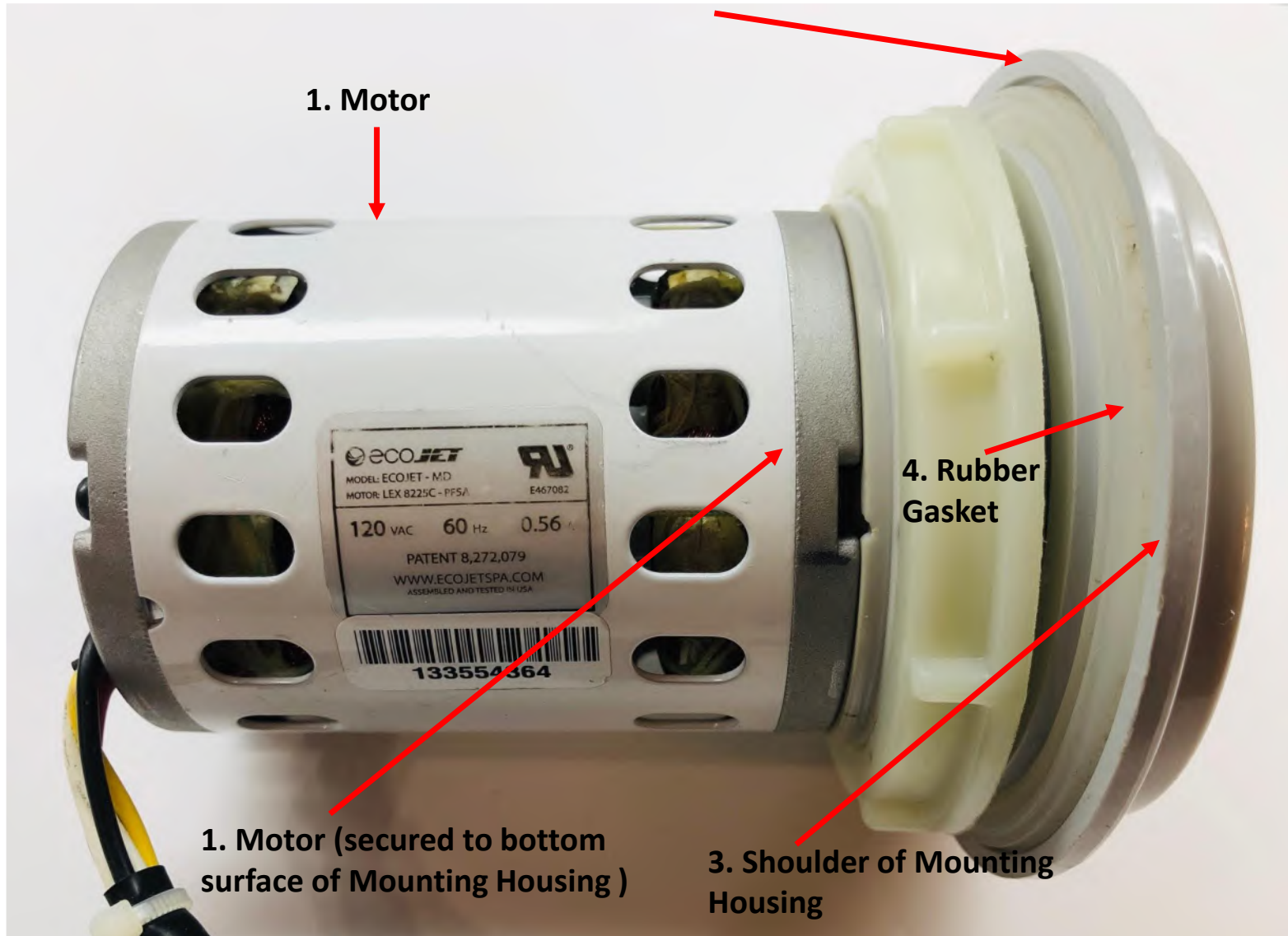
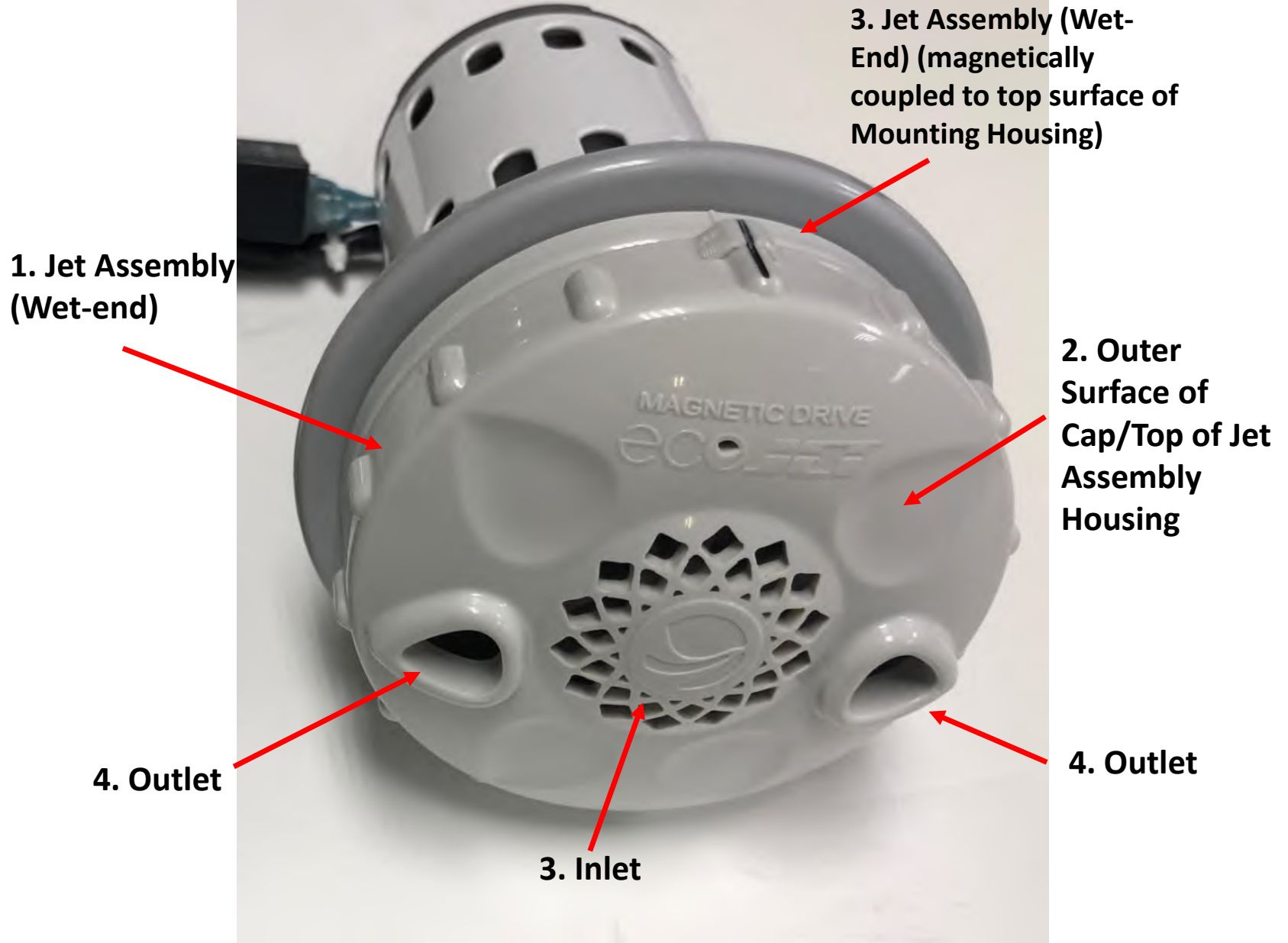


Figure 6



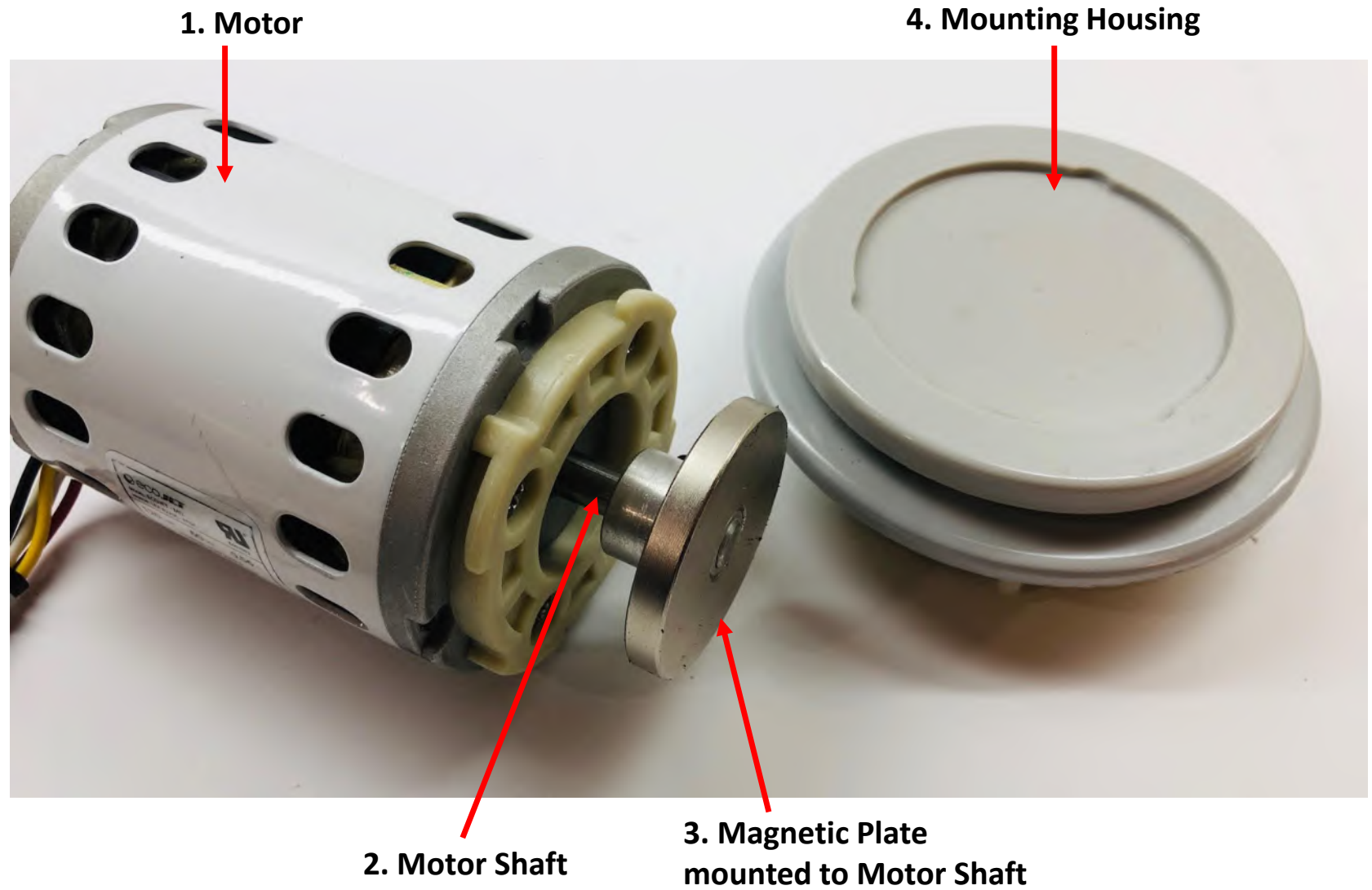
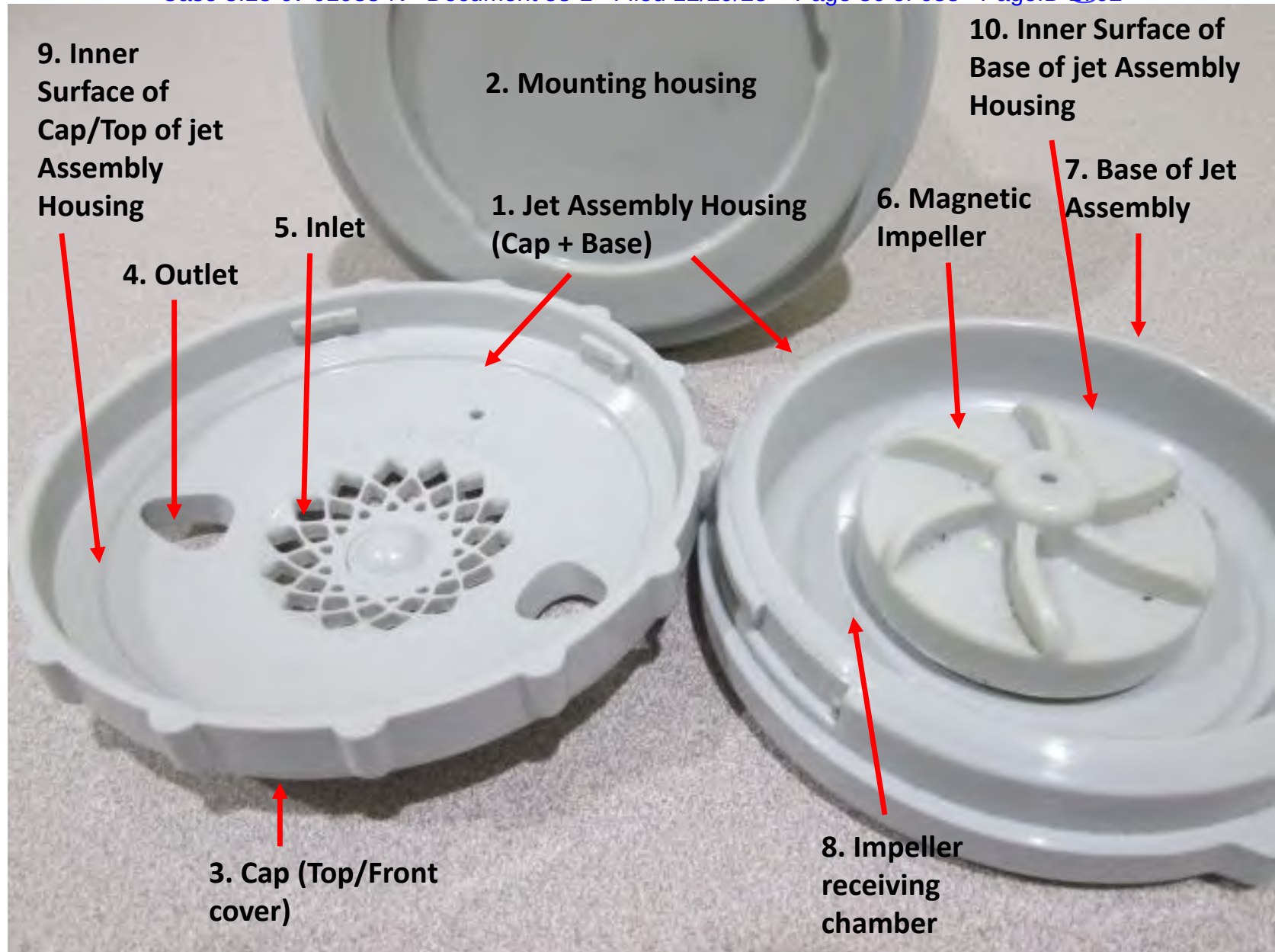


Figure 8



ECO magnetic drive jet

Option - complete set (Wet cover + dry motor)

3. Magnetic Plate (Attached to motor shaft contained Inside of mounting housing)

1. Magnetic Impeller



2. Mounting Housing
front view

This image shows that the Magnetic Plate and Magnetic Impeller rotate on the same axis

FREE
SHIPPING
continental US only

Figure 10

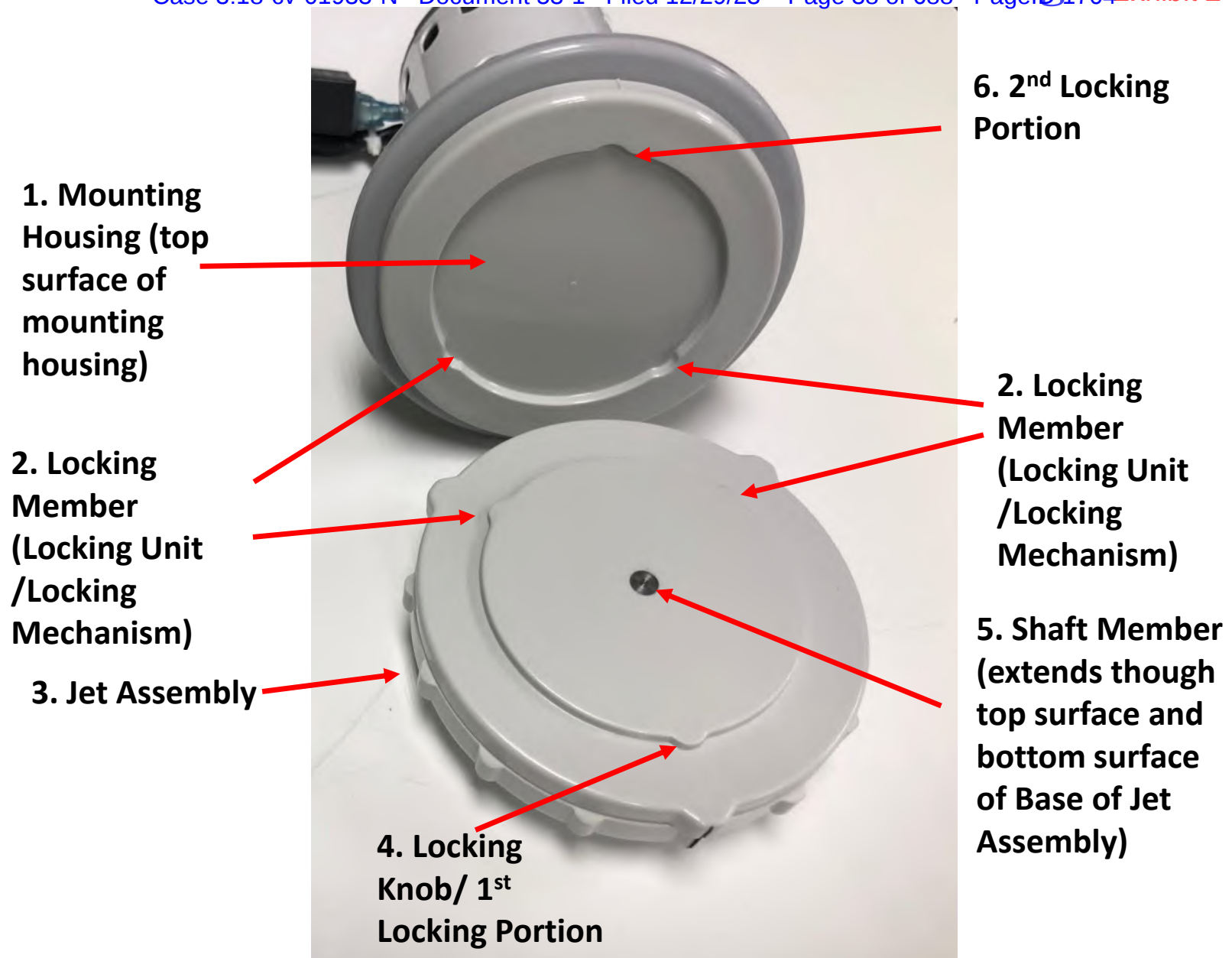
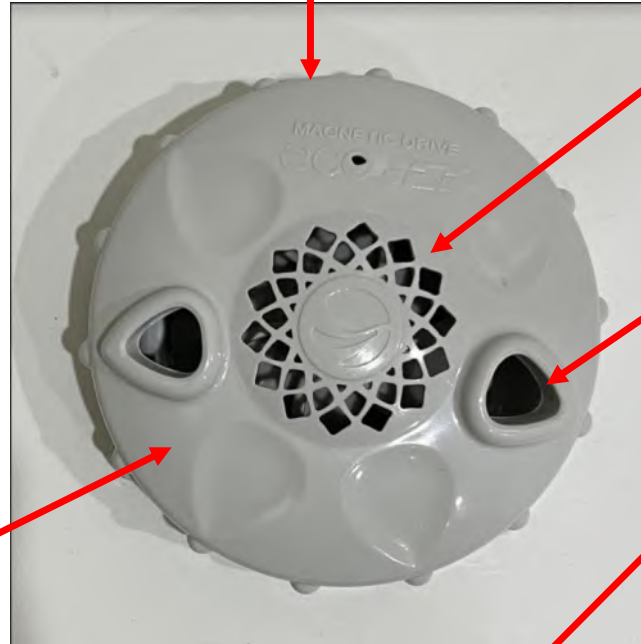


Figure 11

1. Jet Assembly



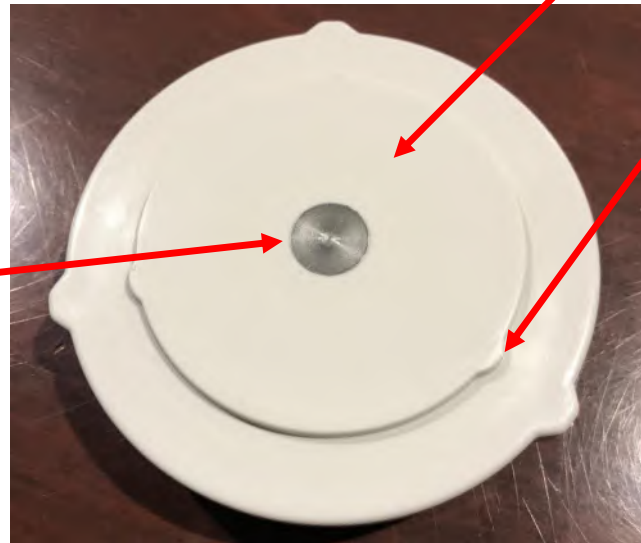
2. Inlet

3. Outlet

**7. Outer Surface
of Cap/Top of jet
Assembly
Housing**

**6. Outer Surface of
Base/Bottom of Jet
Assembly Housing**

**5. Shaft Member
(extends though
top surface and
bottom surface
of Base of Jet
Assembly)**



**4. Locking Knob
(locking mechanism)**

Figure 12

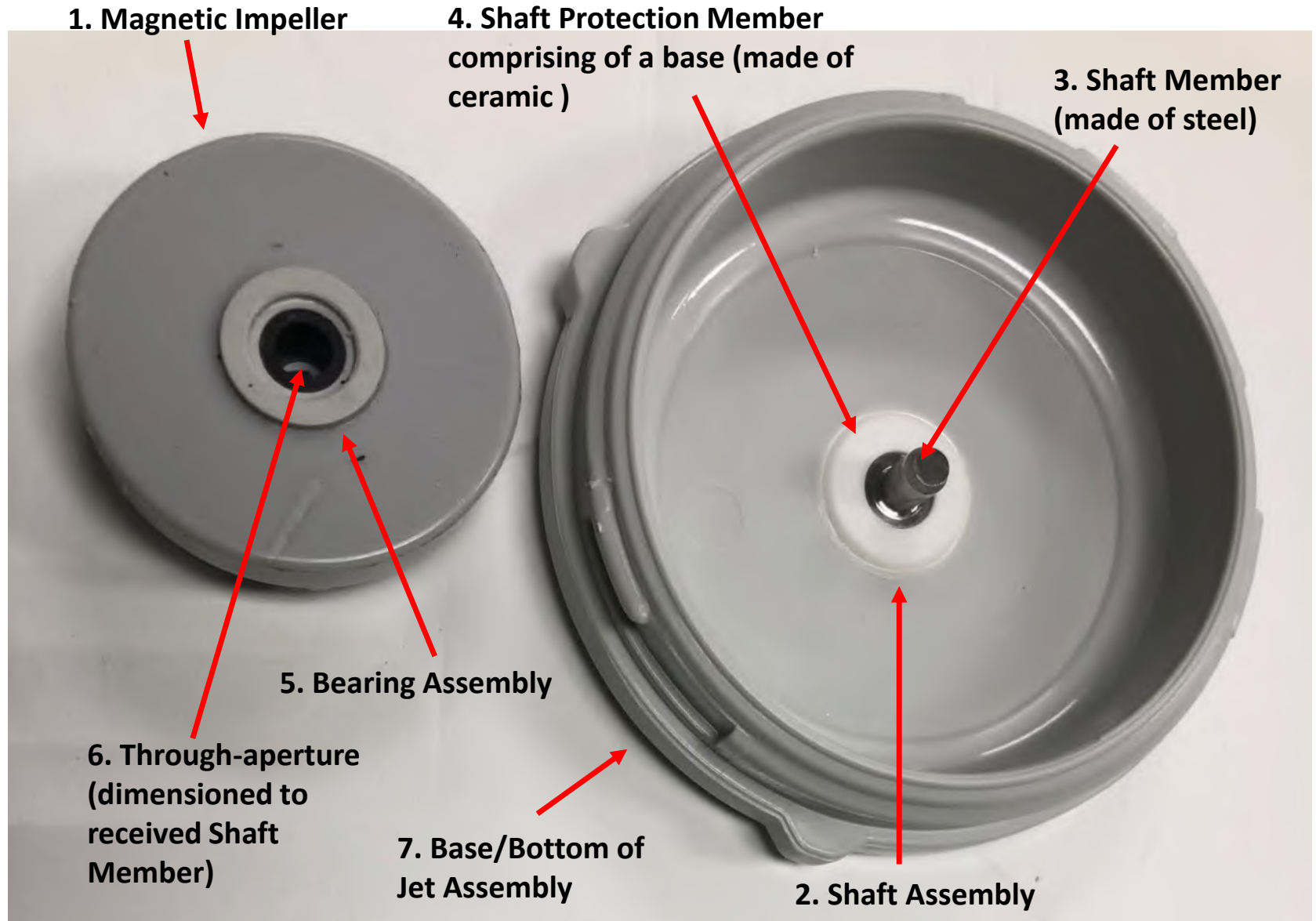


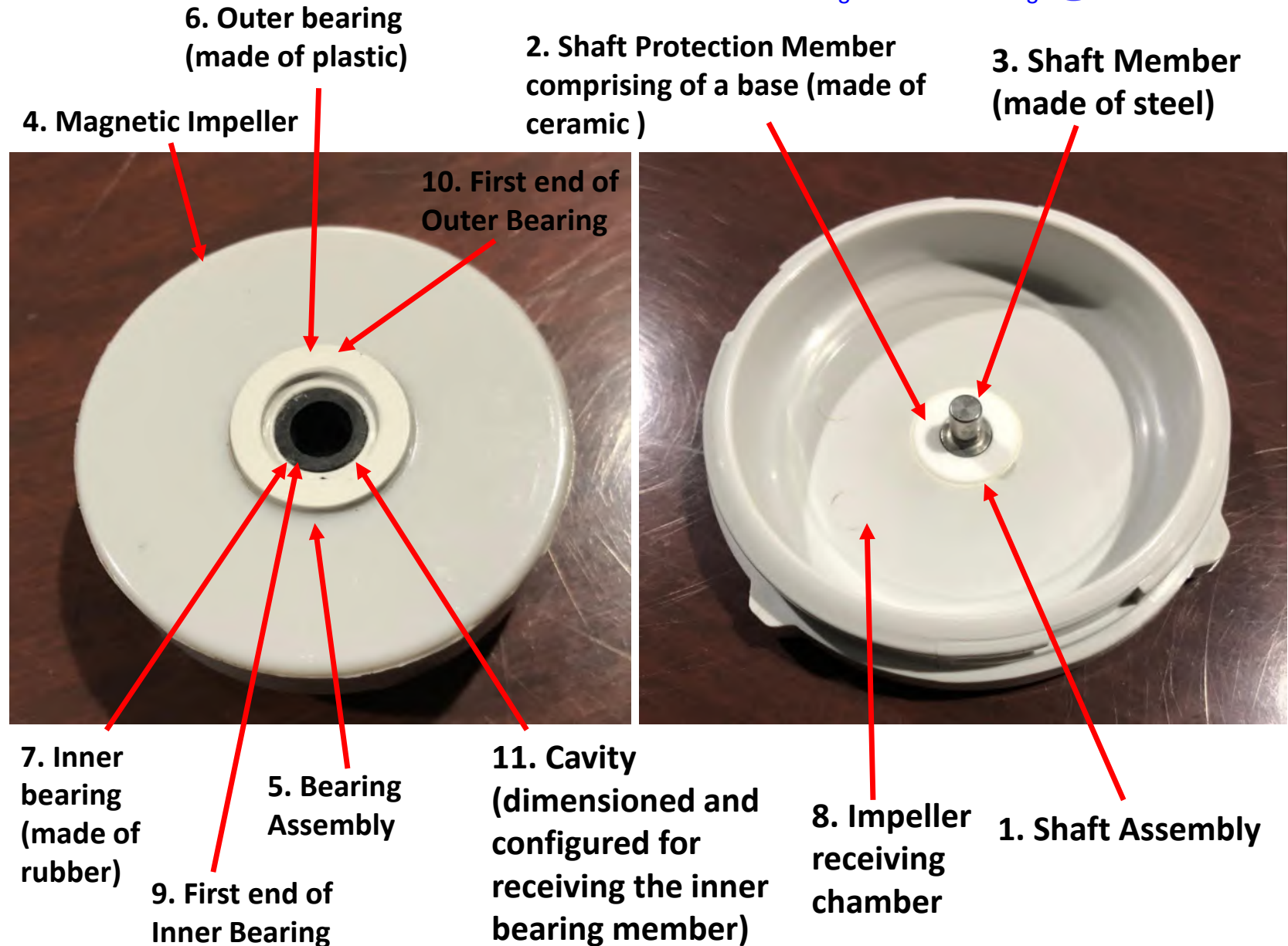
Figure 13

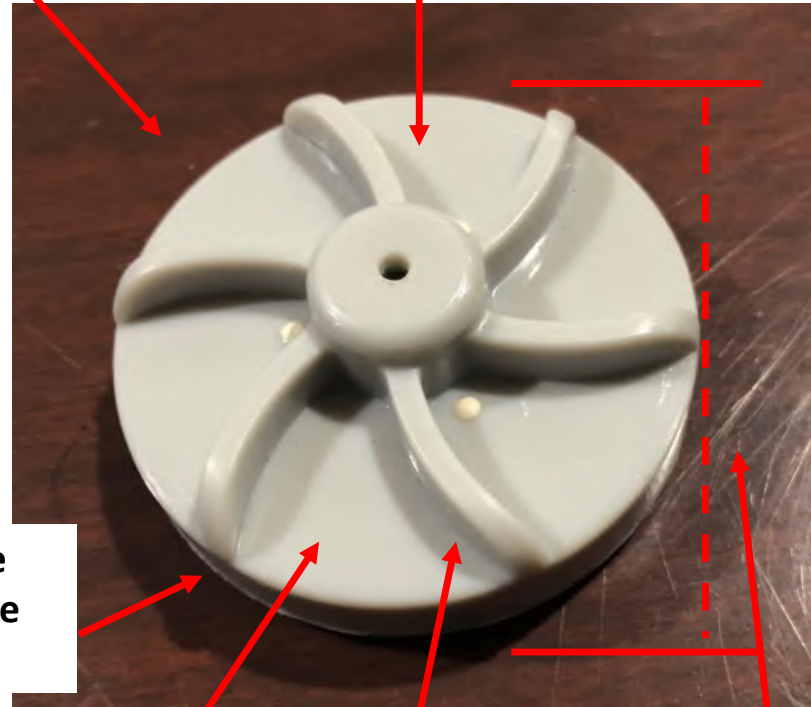
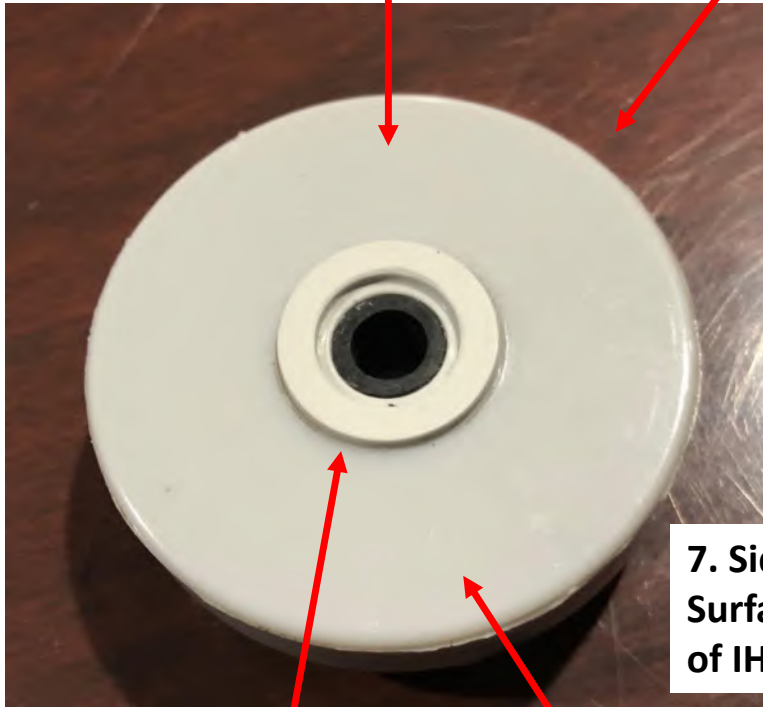
Figure 14

Magnetic Impeller

2. Bottom/Lower Surface of IH

3. Impeller housing ("IH")

4. Top/Upper Surface of IH



7. Side Surface of IH

8. Bearing Assembly

5. Magnetic plate/disk is fully enclosed within Impeller Housing

1. Arm Member

6. Outer Diameter

Figure 15

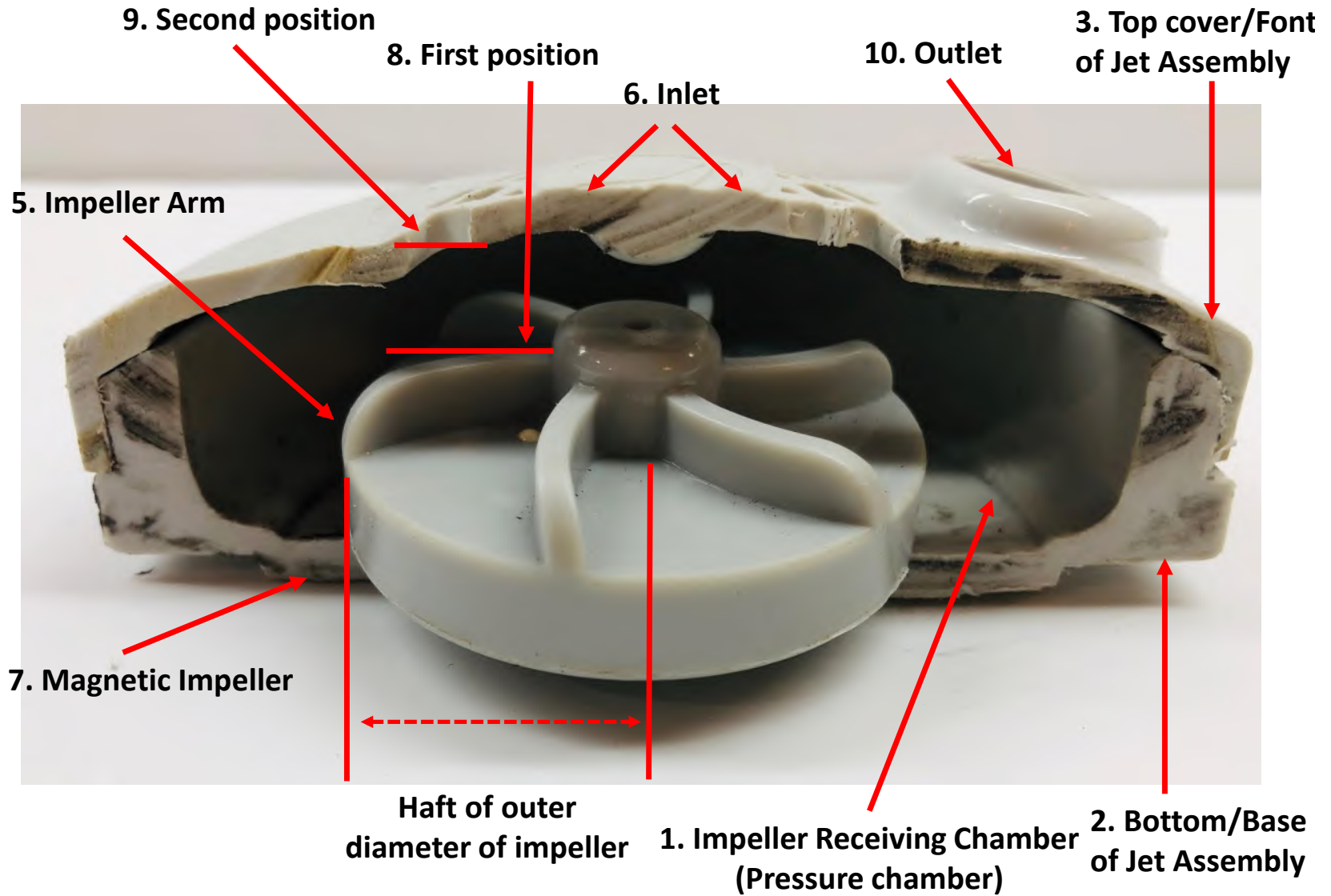
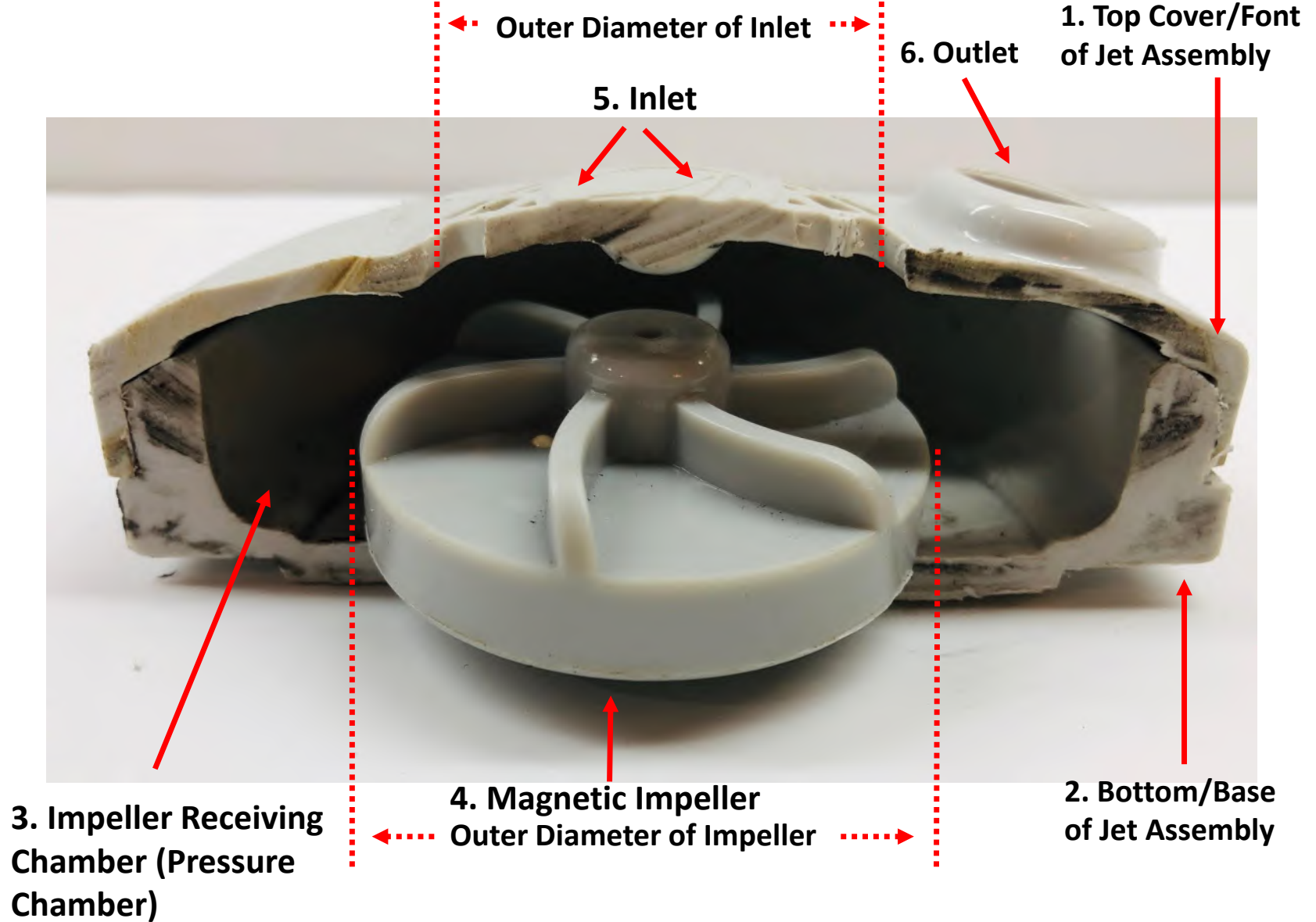




Figure 16

← → ↻ 📄 lexor.com/products/disposable-liners-200ct?variant=42120649212070

age Starts At **\$2495** **FREE SHIPPING** For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key


 **Lexor®** PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



Disposable Liners (200ct)

EcoJet

\$25.00

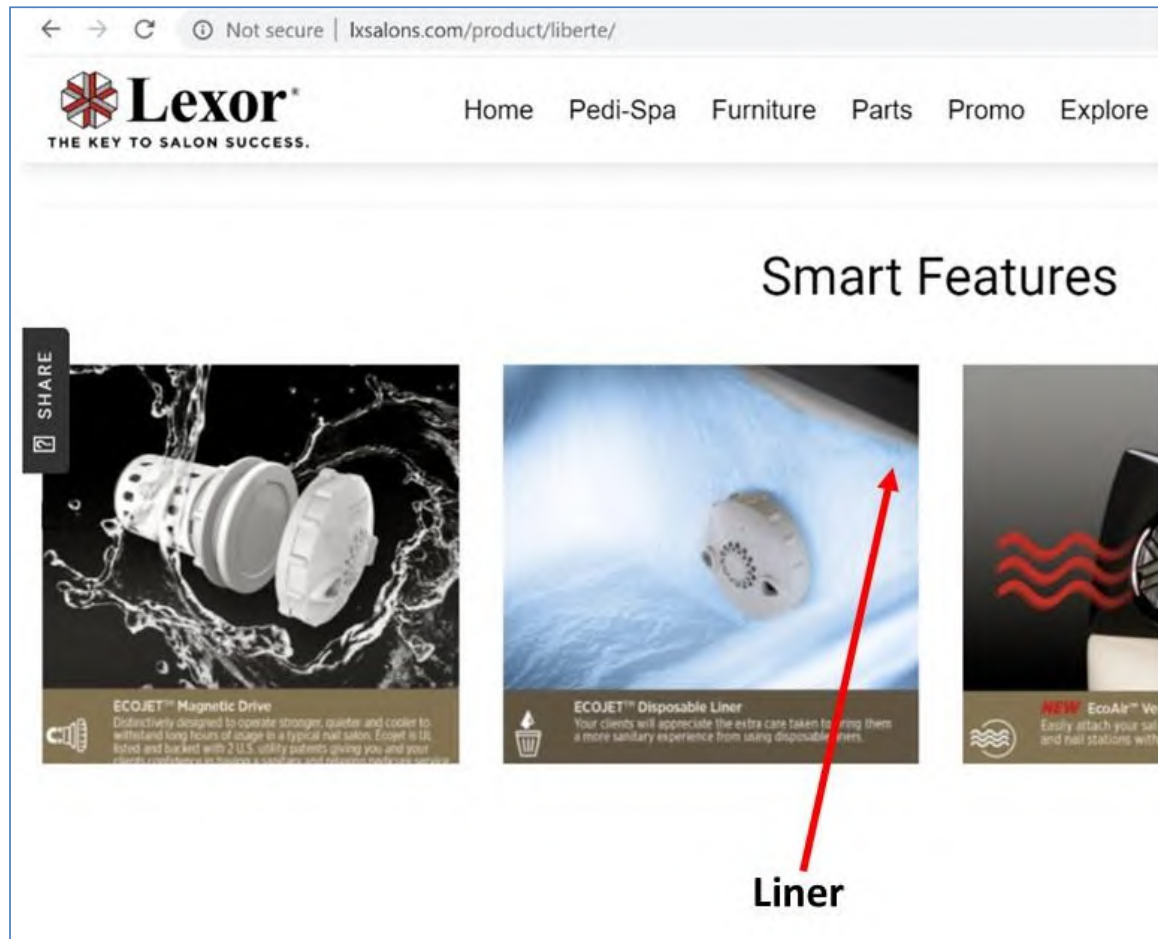
From \$2.31/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.



**1. Outer diameter
of Shaft Protection
Member**

**2. Outer diameter
of Outer Bearing
Member**



1. Prestige model



https://www.youtube.com/watch?time_continue=26&v=kuwENge4QyU (Second 20 shows EcoJet)



(Cropped on Oct 19, 2020)

2. Model Elite



https://www.youtube.com/watch?time_continue=4&v=j3YRg7n8_Pc (Second 19 shows EcoJet)



(Cropped on Oct 19, 2020)

3. Model Luminous



https://www.youtube.com/watch?v=CecFs_NzwbY (Second 22 mentions EcoJet)



(Cropped on Oct 19, 2020)

6. Liberte model



Not secure | lexorcanada.com/product/liberte/

YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for

Not secure | lexorcanada.com/product/liberte/

e... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search

Lexor®
Smart Pedi-Spa. Smart Choice.

PEDICURE SPA FURNITURE ACCESSORIES SPA PARTS CONTACT

Description

Description

For those salons that are constantly pushing the boundaries of class and elegance, Lexor presents: The Liberte™. Keep your clients in awe as they partake in this limitless experience. From the luxurious and high-performing Ultraleather™, to the elegant wood trim to the glowing Aurora LED Color-Changing Bowl, the Liberte™ boasts exclusive stature that only others dream of.

Smart Features:

- Ecojet™ Magnetic Drive (Patent no: RE45844)
- Ecojet™ Disposable Liner
- Tru-Touch™ Shiatsu Massage System (tapping, kneading, rolling, etc.)
- Adjustable Footrest for Comfort

Additional Features:

- 1-Year Limited Warranty
- Includes Classic Curve Pedicure Stool (matching cushion color and adjustable height)
- Supple Leather Cushion
- Fully Functioning Power Seats
- Remote Control (controls seats and massage system)
- Construction: Marble Composite, High Gloss, Acetone-proof Gel Coat
- Foldable Manicure Trays with Removable Cup Holders
- Lift-up Armrest for Easy Access
- Purse/Handbag Hook
- Crystal Bowl

Cropped on Oct 19, 2020

Step 3: Slide the Motor Housing through the hole of the spa basin. Slide the Universal Adapter (backside in) onto the Motor Housing, then hand tighten the Motor Cap Lock-Nut.

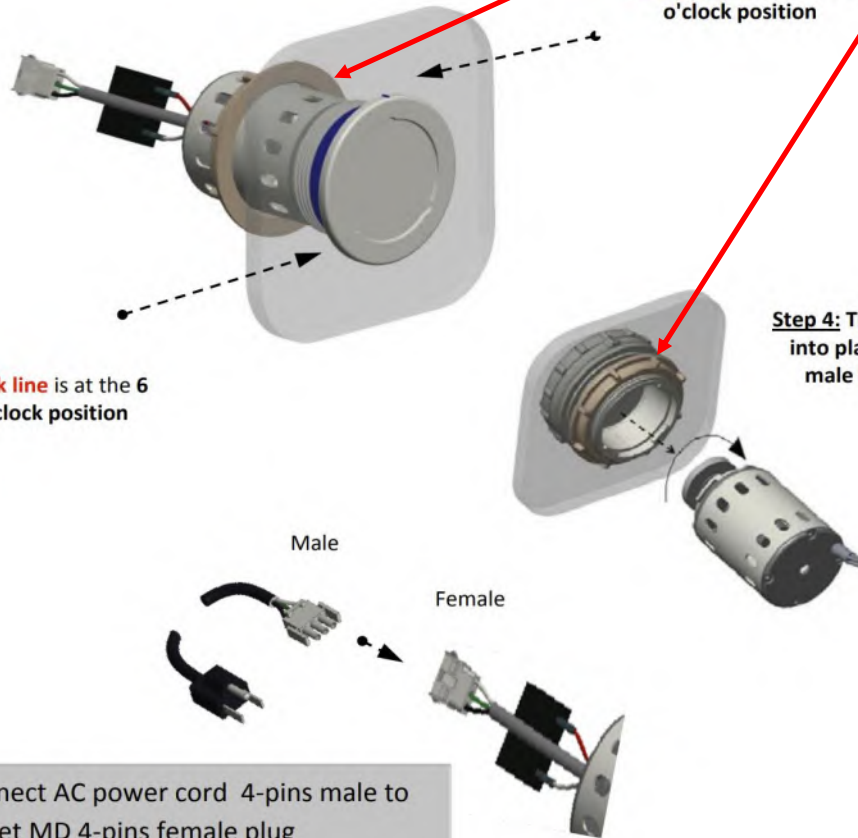
Important: please let it set for a period of 1/2 hours

1. Locking Ring (used to secure mounting housing to wall of spa basin)

Trench Mark is at the 12 o'clock position

Black line is at the 6 o'clock position

Step 4: Turn the motor clockwise until it lock into place. Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug.




Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug (Illustrated)


lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES



ELITE Pedicure Chair
MODEL CODE | SKU : 100079
SALE
\$2,495.00
MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair

QTY. - 1 +


Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At \$1995 -&- Complete 5-piece Spa Package Starts At \$2495 FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

LEXOR

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53"/74" (Upright / Reclined)

31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (optional)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

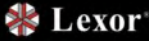
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 📄 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRIVÉ Lounge Pedicure Chair

PROMOTION

\$4,495.00

MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: **IVORY**

BASE COLOR: **BLACK MOONSTONE**

MODEL: **PRIVÉ Lounge Pedicure Chair**

QTY.

Order a complete 5-piece package with a matching n

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **71**
- HEIGHT (Upright/Reclined): **84**
- WIDTH (Trays Closed/Open): **34/49**
- Weight (lb.): **350**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000**

Lexor

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,999.00~~

From \$231/month with **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: DARK WALNUT

MODEL: ENVISION Pedicure Chair

QTY. - 1 +

ADD TO CART BUY IT NOW APPLY FOR FINANCING

SEE PROMOS


BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/envision-pedicure-chair?variant=41769101852838

FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor®

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53 3/4" / 74" (Upright / Reclined)

31" / 47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 500 GPH At Floor Level


Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

LEXOR® CARE

← → ↻ 📄 lexor.com/products/infinity-pedicure-chair?variant=41769152676006


 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO





The image shows a high-end, brown leather pedicure chair with a black base and a matching black footrest. A small, matching black stool is positioned to the left of the chair. The chair has a high backrest, armrests, and a control panel on the side of the base.

INFINITY Pedicure Chair

SALE
\$1,995.00
~~MSRP \$2,795.00~~

From \$185/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair ▾

QTY.

Order a complete 5-piece package with a matching

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/Infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor®

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

53"/74" (Upright / Reclined)

31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

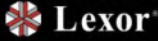
FLOWRATE: 500 GPH At Floor Level


Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**


 [PEDICURE CHAIRS](#) [PROMOTIONS](#) [SPECIAL FEATURES](#) [SALON FURNITURE](#) [PARTS & ACCESSORIES](#) [SHO](#)





A high-end, brown leather-upholstered pedicure chair with a black base and a foot spa. A matching brown leather stool is positioned to the left of the chair.

LIBERTÉ Pedicure Chair

SALE
\$2,395.00
~~MSRP: \$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL: LIBERTÉ Pedicure Chair ▾

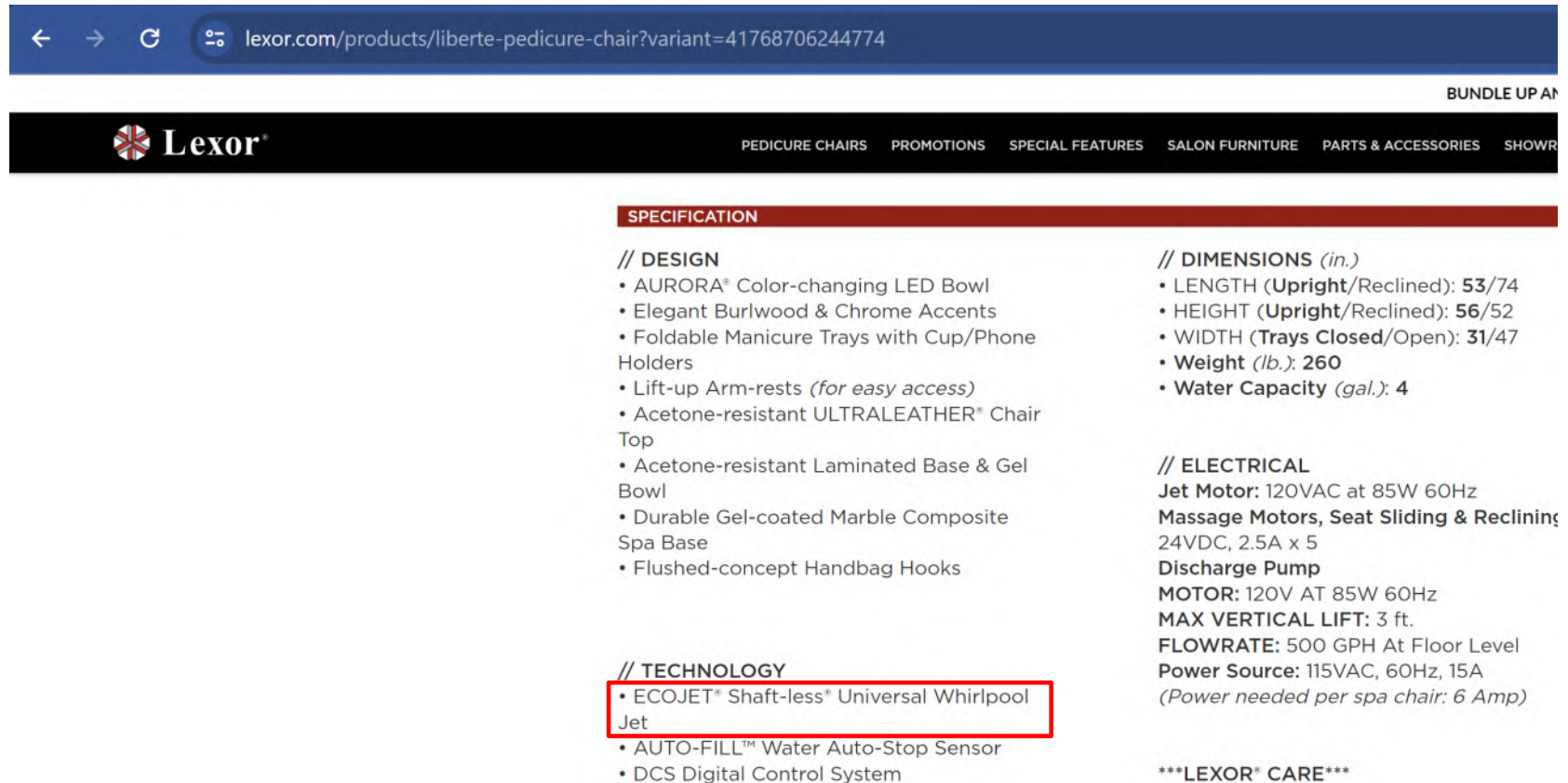
QTY:

Order a complete 5-piece package with a matching i

[ADD TO CART](#) [BUY IT NOW](#)

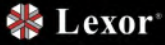
[SEE PROMOS](#)


BUYER OUTSIDE OF NORTH AMERICA



← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

BUNDLE 1

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRESTIGE Pedicure Chair

SALE


\$2,495.00

MSRP: ~~\$3,000.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA




PEDI-BOWL COLOR: WHITE PEARL

MODEL: PRESTIGE Pedicure Chair ▾

QTY. 1

← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As **1%** With Credit Key

 **Lexor®**

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

" data-bbox="445 295 910 365"/>

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

lexor.com/products/luminous-pedicure-chair?variant=41753030033574

BUNDLE

Lexor

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO

LUMINOUS Pedicure Chair

SALE
\$2,195.00
MSRP: ~~\$2,995.00~~

From \$203/month with Credit Key
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: ESPRESSO

MODEL LUMINOUS Pedicure Chair


QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



lexor.com/products/luminous-pedicure-chair?variant=41753030033574

JP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

US 10,288,071 Claim Language	Evidence of Infringement EcoJet Universal 3.5 (Shafted)
<p>1. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:</p>	<p>The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html. See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 23 and 22.</p>
<p>a) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,</p>	<p>As shown in Fig. 4, 11(5-7, and 9) , and 14(1 and 4), the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing.</p>
<p>b) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,</p>	<p>Again, referring to Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, one inlet aperture, and one outlet aperture.</p>
<p>c) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,</p>	<p>As shown in Fig. 19(2-4) and 20(2-3 and 5) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.</p>
<p>d) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,</p>	<p>Again, referring to Fig. 19(4 and 7) and 20(4-5) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.</p>
<p>e) wherein said bearing assembly comprises at least one bearing member,</p>	<p>Again, referring to Fig. 15(1-3) the bearing assembly comprises at least one bearing member.</p>
<p>f) wherein said at least one bearing member is dimensioned and configured such that a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,</p>	<p>As shown in Fig. 14(2 and 4-9) and 15(1-3) at least one bearing member is dimensioned and configured such that a first end of at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use.</p>

g) wherein said shaft assembly comprises said shaft member and said shaft protection member,	As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises the shaft member and the shaft protection member.
h) wherein said shaft member extends through said inner surface of said jet assembly housing,	As shown in Fig. 13(5) and 18(1-3) the shaft member extends through the inner surface of the jet assembly housing.
i) wherein said shaft protection member's base further comprises a bottom surface, and a diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material;	As shown in Fig. 14(2 and 4) and 17(2) the shaft protection member's base further comprises a bottom surface, and a diameter, wherein base of shaft protection member is positioned between bearing assembly and base of jet assembly housing. Shaft protection member is manufactured of a ceramic (hard material).
j) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
k) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member; and	As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
l) a locking mechanism for securing said jet assembly housing to said mounting housing member to prevent rotation of said jet assembly housing during operational use.	As shown in Fig. 12(1-2 and 4-5) a locking mechanism for securing the jet assembly housing to the mounting housing member to prevent rotation of the jet assembly housing during operational use.
2. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 15(3) the outer bearing member is manufactured of plastic material.
3. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.	As shown in Fig. 15(2) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.
4. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3), 17(1), and 18(3) the shaft member is of steel or a metal material.

<p>5. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft protection member is manufactured of a ceramic material.</p>	<p>As shown in Fig. 14(2) and 17(2) the shaft protection member is manufactured of a ceramic or ceramic-type material.</p>
<p>6. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said at least one bearing member is an outer bearing member and an inner bearing member, wherein said outer bearing member is manufactured of a plastic material, wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein said shaft member is manufactured of steel or a metal material.</p>	<p>As shown in Fig. 14(3 and 5-6), 15(2-3), 17(1), and 18(3) outer bearing member and an inner bearing member, wherein outer bearing member is manufactured of a plastic material, wherein inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein shaft member is manufactured of steel or a metal material.</p>
<p>7. The combination jet assembly and mounting housing member apparatus according to claim 6, wherein said shaft protection member is manufactured of a ceramic material.</p>	<p>As shown in Fig. 14(2) and 17(2) the shaft protection member is manufactured of a ceramic material.</p>
<p>8. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said combination jet assembly and mounting housing member apparatus is adapted for being coupled to the motor assembly to form a magnetic coupling-type pump, wherein said magnetic impeller comprises a magnetic pole array, wherein said motor shaft member is adapted for being rotated such that a magnetic field generated by said magnetic pole array plate of said motor assembly moves or fluctuates in accordance with the rotation of said magnetic pole array plate of said motor assembly, wherein said motor drives said magnetic pole array plate, wherein said magnetic field moves and/or causes rotation of said magnetic pole array of said magnetic impeller, and wherein rotation of said magnetic impeller results in the fluid being drawn towards said magnetic impeller through said at least one inlet aperture and the fluid to be propelled out of said jet assembly through said at least one outlet aperture.</p>	<p>As shown in Fig. 4, 8(1-6), 10(1-4), 16(2), 19(1, 4, and 6-7), and 20(1 and 4-6) the jet assembly is adapted to couple to the motor assembly. The magnetic impeller comprises a magnetic pole array, the motor assembly comprises a motor, a magnetic pole array, and a motor shaft member adapted for being rotated such that the magnetic field generated by the magnetic pole array of the motor assembly rotates the magnetic impeller. This rotation results in the fluid being drawn to the impeller through the inlet aperture and be propelled out of the jet assembly through the outlet aperture.</p>
<p>9. The combination jet assembly and mounting housing member apparatus according to claim 1,</p>	<p>The Ecojet Universal 3.5 is as sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html. See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 23 and 22.</p>

a) wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member,	As shown in Fig. 14(4-6) and 15(1-3) the bearing assembly comprises an outer bearing member and an inner bearing member.
b) wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said second end of said body of said outer bearing member, wherein said cavity of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller,	As shown in Fig. 14(5-6 and 8-9) and 16(2- 5) the outer bearing member comprises a base comprising a cavity, wherein the body of the outer bearing member extends upwardly from the base of the outer bearing member, and the cavity the outer bearing member is dimensioned and configured for receiving the inner bearing member. The outer bearing member is dimensioned and configured for fitting within cavity of magnetic impeller.
c) wherein said inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and	Again, referring to Fig. 14(5-6 and 8-9) and 16(2- 5) the inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from first end of body of inner bearing member to second end of body of inner bearing member, wherein inner bearing member is dimensioned and configured for fitting within cavity of body of outer bearing member and within cavity of magnetic impeller.
d) wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.	As shown in Fig. 14(5-6) and 15(2-3) the outer bearing member and inner bearing member are positioned adjacent to one another and are aligned axially with one another during operational use.
10. A magnetic coupling-type fluid pump used for dispensing a fluid to an environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 23 and 22.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 8(1) and 10(1-3) the motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.
b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller,	As shown in Fig. 4, 11(5, 6,7, and 9) , and 14(1 and 4) the jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller.

c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 4, 8(1-6), and 10(1-3) the magnetic plate that mounted on the motor shaft and magnetic impeller rotate on a same axis during operation.
d) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture,	As shown in Fig. Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture.
e) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,	As shown in Fig. 19(2-4) and 20(2-3 and 5) the impeller-receiving chamber is defined by the base and the font cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,	As shown in Fig. 19(4 and 7) and 20(4-5) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and allows the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
g) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 15(1-3) the bearing assembly comprises an outer bearing member and a sleeve-type, inner bearing member.
h) wherein said at least one bearing member is dimensioned and configured such that a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,	As shown in Fig. 14(2 and 4-9) and 15(1-3) the outer bearing member is dimensioned and configured such that first end of outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use.
i) wherein said shaft assembly comprises said shaft member and said shaft protection member,	As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises the shaft member and the shaft protection member.
j) wherein said shaft member extends through said inner surface of said jet assembly housing, and	As shown in Fig. 13(5) and 18(1-3) the shaft member extends through the inner surface of the jet assembly housing.
k) wherein said shaft protection member's base further comprises a bottom surface, and a diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material; and	As shown in Fig. 14(2 and 4) and 17(2) the shaft protection member's base comprises a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing, and wherein the shaft protection member is manufactured of a ceramic (hard material).

l) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,	As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprises a top surface, a bottom surface, and a shoulder (where the rubber gasket against to) dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries.
m) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while the motor assembly is secured to the bottom surface of the mounting housing member.
11. The fluid pump according to claim 10, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 15(3) the outer bearing member is made of plastic material.
12. The fluid pump according to claim 10, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.	As shown in Fig. 15(2) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.
13. The fluid pump according to claim 10, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3), 17(1), and 18(3), the shaft member is of steel or a metal material.
14. The fluid pump according to claim 10, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 14(2) and 17(2) the shaft protection member is manufactured of a ceramic material.
15. The fluid pump according to claim 10, wherein said at least one bearing member is an outer bearing member and an inner bearing member, wherein said outer bearing member is manufactured of a plastic material, wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3 and 5-6), 15(2-3), 17(1), and 18(3) the at least one bearing member is an outer bearing member and an inner bearing member, wherein outer bearing member is manufactured of a plastic material, wherein inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and wherein shaft member is manufactured of steel or a metal material.
16. The fluid pump according to claim 15, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 14(2) and 17(2) the shaft protection member is manufactured of a ceramic material.

<p>17. The fluid pump according to claim 10, wherein said magnetic impeller comprises a magnetic pole array, wherein said motor assembly further comprises a magnetic pole array and a motor shaft member adapted for being rotated such that a magnetic field generated by said magnetic pole array of said motor assembly moves or fluctuates in accordance with the rotation of said magnetic pole array of said motor assembly, wherein said motor drives said magnetic pole array of said motor assembly, wherein said magnetic field moves and/or causes rotation of said magnetic pole array of said magnetic impeller, and wherein rotation of said magnetic impeller results in the fluid being drawn towards said magnetic impeller through said at least one inlet aperture and the fluid to be propelled out of said jet assembly through said at least one outlet aperture.</p>	<p>As shown in Fig. 4, 8(1-6), 10(1-4), 16(2), 19(1, 4, and 6-7), and 20(1 and 4-6) the jet assembly is adapted to couple to the motor assembly. The magnetic impeller comprises a magnetic pole array, wherein motor assembly further comprises a magnetic pole array and a motor shaft member adapted for being rotated such that a magnetic field generated by magnetic pole array of motor assembly moves or fluctuates in accordance with the rotation of magnetic pole array of motor assembly, wherein motor drives magnetic pole array of motor assembly, wherein said magnetic field moves and/or causes rotation of magnetic pole array of magnetic impeller, and wherein rotation of magnetic impeller results in the fluid being drawn towards magnetic impeller through at least one inlet aperture and the fluid to be propelled out of jet assembly through at least one outlet aperture.</p>
<p>18. The fluid pump according to claim 10,</p>	<p>The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html. See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 23 and 22.</p>
<p>a) wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member,</p>	<p>As shown in Fig. 14(4-6) and 15(1-3) the bearing assembly comprises an outer bearing member and an inner bearing member.</p>
<p>b) wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said second end of said body of said outer bearing member, wherein said cavity of said body of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller,</p>	<p>As shown in Fig. 14(5-6 and 8-9) and 16(2- 5) the outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from first end of body of outer bearing member to second end of body of outer bearing member, wherein cavity of body of body of outer bearing member is dimensioned and configured for receiving inner bearing member, and wherein outer bearing member is dimensioned and configured for fitting within cavity of magnetic impeller.</p>

<p>c) wherein said inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and</p>	<p>Again, referring to Fig. 14(5-6 and 8-9) and 16(2- 5) the inner bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from first end of body of inner bearing member to second end of body of inner bearing member, wherein inner bearing member is dimensioned and configured for fitting within cavity of body of outer bearing member and within cavity of magnetic impeller.</p>
<p>d) wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.</p>	<p>As seen in Fig. 14(5-6) and 15(2-3) the outer bearing member and inner bearing member are positioned adjacent to one another and are aligned axially with one another in operational use.</p>
<p>19. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said diameter of said base of said shaft protection member is larger than or equal to an outer diameter of said at least one bearing member.</p>	<p>As shown in Fig. 27(1-2) the diameter of the base of the shaft protection member is larger than or equal to the outer diameter of at least one bearing member.</p>
<p>21. The combination jet assembly and mounting housing member apparatus according to claim 20, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.</p>	<p>As shown in Fig. 15(2) at least a portion of at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.</p>
<p>22. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said mounting housing member further comprises at least one mounting leg.</p>	<p>As shown in Fig. 8(3) the mounting housing member comprises at least one mounting leg.</p>
<p>23. The combination jet assembly and mounting housing member apparatus according to claim 22, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.</p>	<p>As shown in Fig. 8(2-3) the mounting housing member comprises at least one mounting leg and is dimensioned and configured for receiving a wing nut.</p>
<p>25. The fluid pump according to claim 10, wherein said base of said shaft protection member makes contact with said first end of said at least one bearing member during operational use.</p>	<p>As shown in Fig. 14(3-5 and 7) the base of said shaft protection member makes contact with first end of at least one bearing member during operational use.</p>

26. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type fluid pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 23 and 22.
a) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,	As shown in Fig. 4, 11(5-7, and 9) , and 14(1 and 4) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.
b) wherein said jet assembly housing comprising an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	Referring to Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, one inlet aperture, and one outlet aperture.
c) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another,	As shown in Fig. 19(2-4) and 20(2-3 and 5) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
d) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use,	Again, referring to Fig. 19(4 and 7) and 20(4-5) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
e) wherein said bearing assembly comprises an outer bearing member and an inner bearing member,	As shown in Fig. 14(4-6) and 15(1-3) the bearing assembly comprises an outer bearing member and an inner bearing member.
f) wherein said outer bearing member has a diameter and is dimensioned and configured such that a first end of said outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use,	As shown in Fig. 14(2 and 4-9) and 15(1-3) the outer bearing member has a diameter and is dimensioned and configured such that a first end of the outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use.
g) wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use,	As shown in Fig. 15(2) inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.
h) wherein said shaft assembly comprises said shaft member and a shaft protection member,	As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises the shaft member and the shaft protection member.
i) wherein said shaft member extends through an inner surface of a base of said jet assembly housing,	As shown in Fig. 13(5), 14(3), and 18(3) the shaft member extends through the inner surface of the jet assembly housing.

j) wherein said shaft protection member's base further comprises a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing,	As shown in Fig. 14(2 and 4) and 17(2) the shaft protection member's base further comprises a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing.
k) wherein said shaft protection member is manufactured of a hard material, and	As shown in Fig. 14(2) and 17(2) the shaft protection member is manufactured of ceramic (hard material).
l) wherein said diameter of said base of said shaft protection member is greater than or equal to said diameter of said outer bearing member; and	As shown in Fig. 17(1-2) the diameter shaft protection member is greater than or equal to the diameter of the outer bearing member.
m) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
n) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
28. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said shaft protection member is manufactured of a ceramic material.	As shown in Fig. 14(2) and 17(2) the shaft protection member is manufactured of a ceramic material.
29. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3), 17(1), and 18(3) the shaft member is manufactured of steel or a metal material.
30. The combination jet assembly and mounting housing member apparatus according to claim 26, wherein said base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.	As shown in Fig. 4, 14(2, 5, and 7), 19(7) and 20(4) the base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.

Figures for Ecojet Universal 3.50/
Second Model/Version
Shafted EcoJet II

Ecojet II magnetic drive jet
Option - wet cover & dry motor













lexor.com/product/ecojet-universal-jet-set-3-5-gray/

e... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search f

Contact Showrooms Financing Free Shipping on Spa Parts \$50+ | Call or Chat with us to place your order!

Lexor®
THE KEY TO SALON SUCCESS.


HomePedi-SpaFurniturePartsPromoExploreIdeas


YOUR CART
\$0.00

ALL CATEGORIES


Searching for ...

All Categories



 (888) 479-6916

Home > Spa Parts > Plumbing Parts > EcoJet Universal Jet Set 3.5- Gray



EcoJet Universal Jet Set 3.5- Gray


\$125.00

Availability: In Stock

-

1

+

 ADD TO CART

SKU: ecojet-magnetic-drive-jet-kit

Categories: Plumbing Parts, Spa Parts

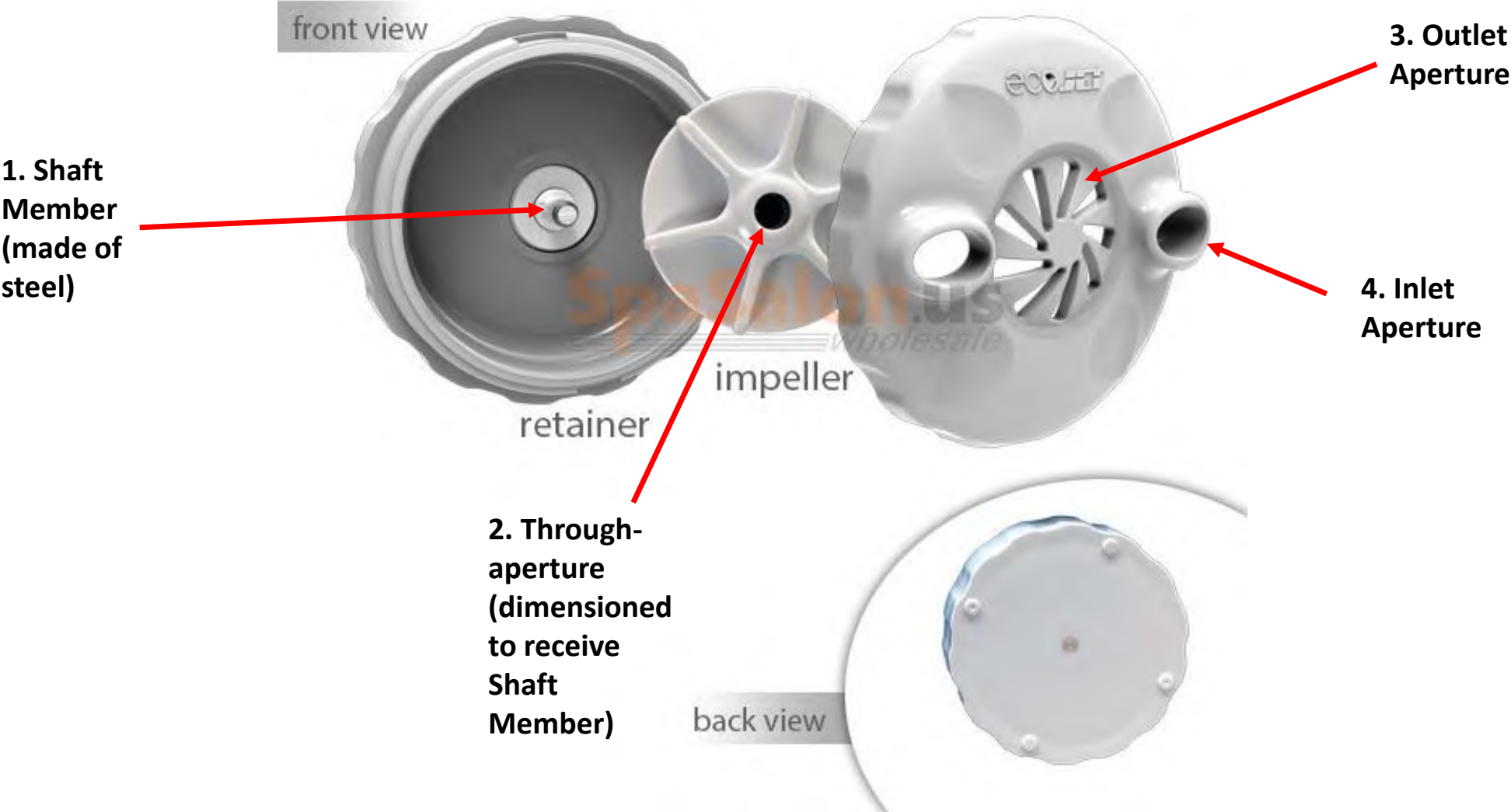
Description

Additional information

Cropped on Oct 18, 2020

<div>ecoJET® For Clean Choose Green</div>					
JET	MOTOR HOUSING			IMPELLER	COMPATIBILITY
ECOJET® UNIVERSAL Motor Housing & Wet-end has 4 locking dot-points.					
OTHER COMPATIBLE BRANDS Ecojet® Universal Wet-end can be replaced for other brands with 4 locking dot-points.					
OTHER JETS Ecojet® Universal Wet-end can not be used on these after market jets.					 • Replace with genuine Ecojet® Universal whole set.
					 • Replace with genuine Ecojet® Universal whole set.
		n/a			 • Replace with genuine Ecojet® Universal whole set.
					 • Replace with genuine Ecojet® Universal whole set.
ECOJET® 2017 Motor Housing & Wet-end has 3 locking dot-points.					

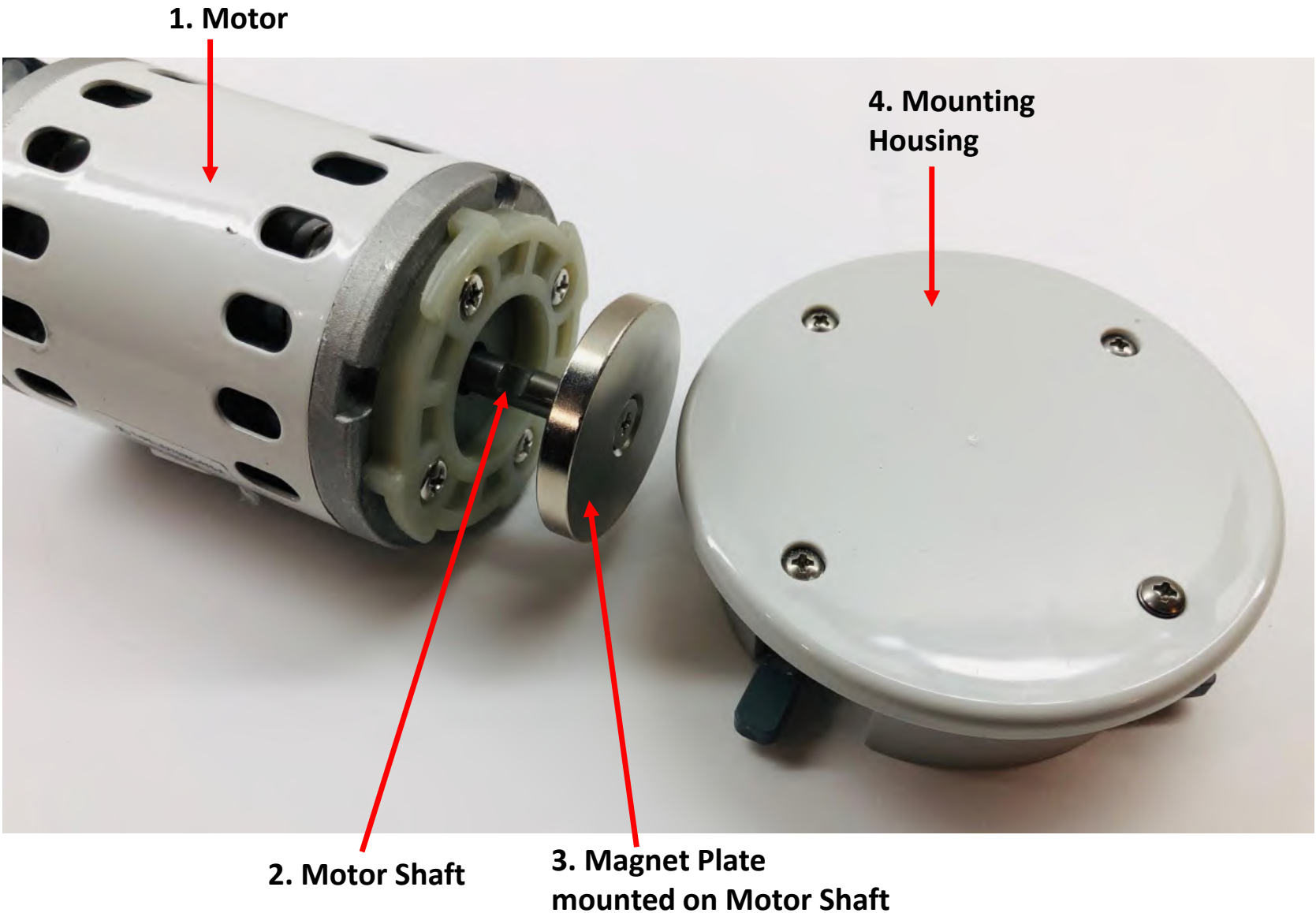
ECO magnetic jet
Option - new (cover + impeller + retainer)



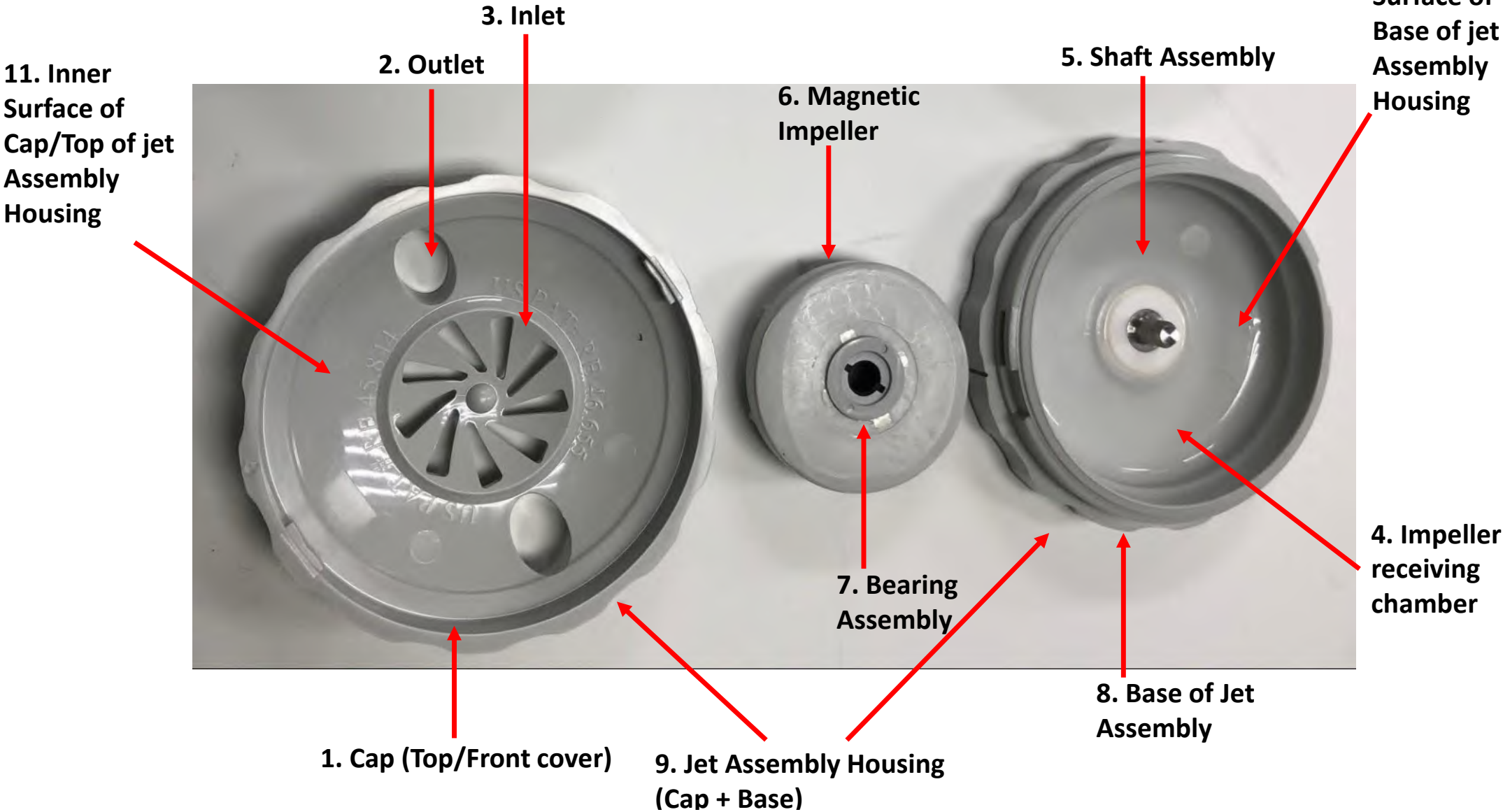


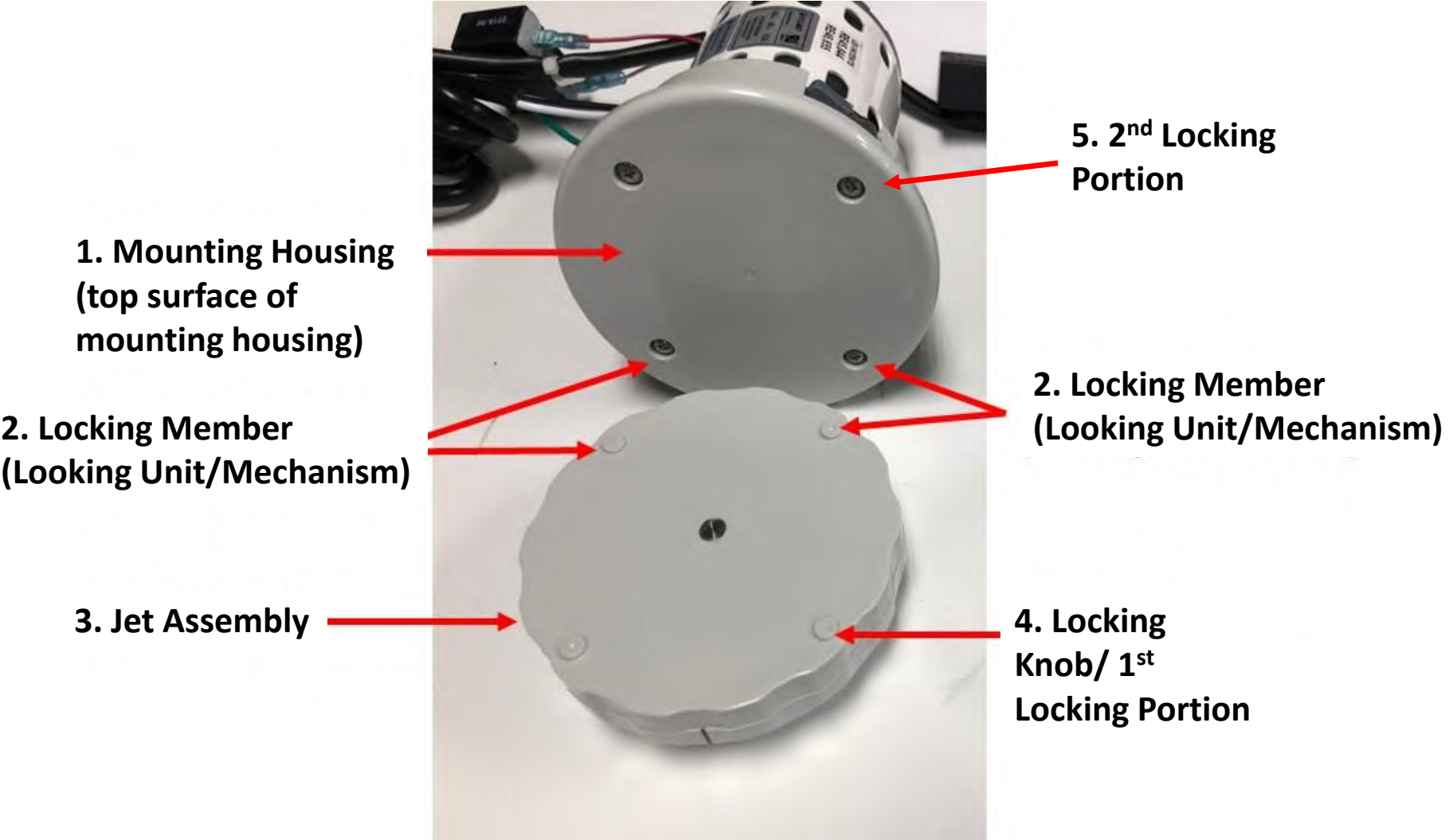
**1. Jet Assembly
(Wet-end)
(magnetically
coupled to top
surface of
Mounting
Housing)**





Jet Assembly





1. Jet Assembly

2. Inlet

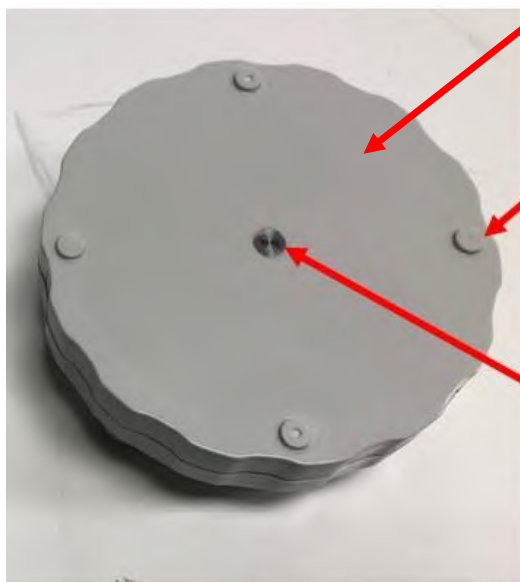
3. Outlet

**7. Outer Surface of
Cap/Top of jet
Assembly Housing**

**6. Outer Surface of Jet
Assembly Housing**

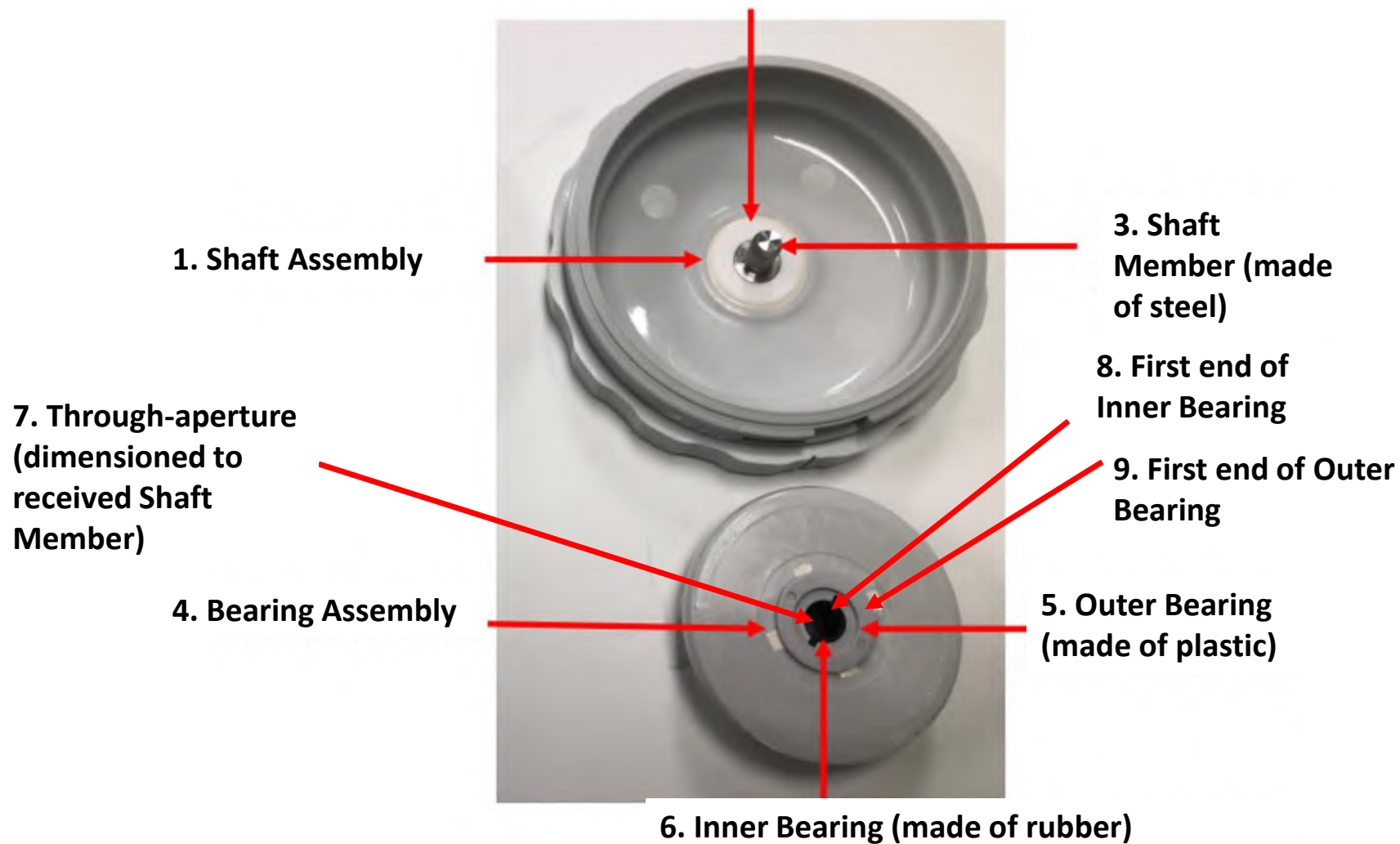
**4. Locking Knob
(locking mechanism)**

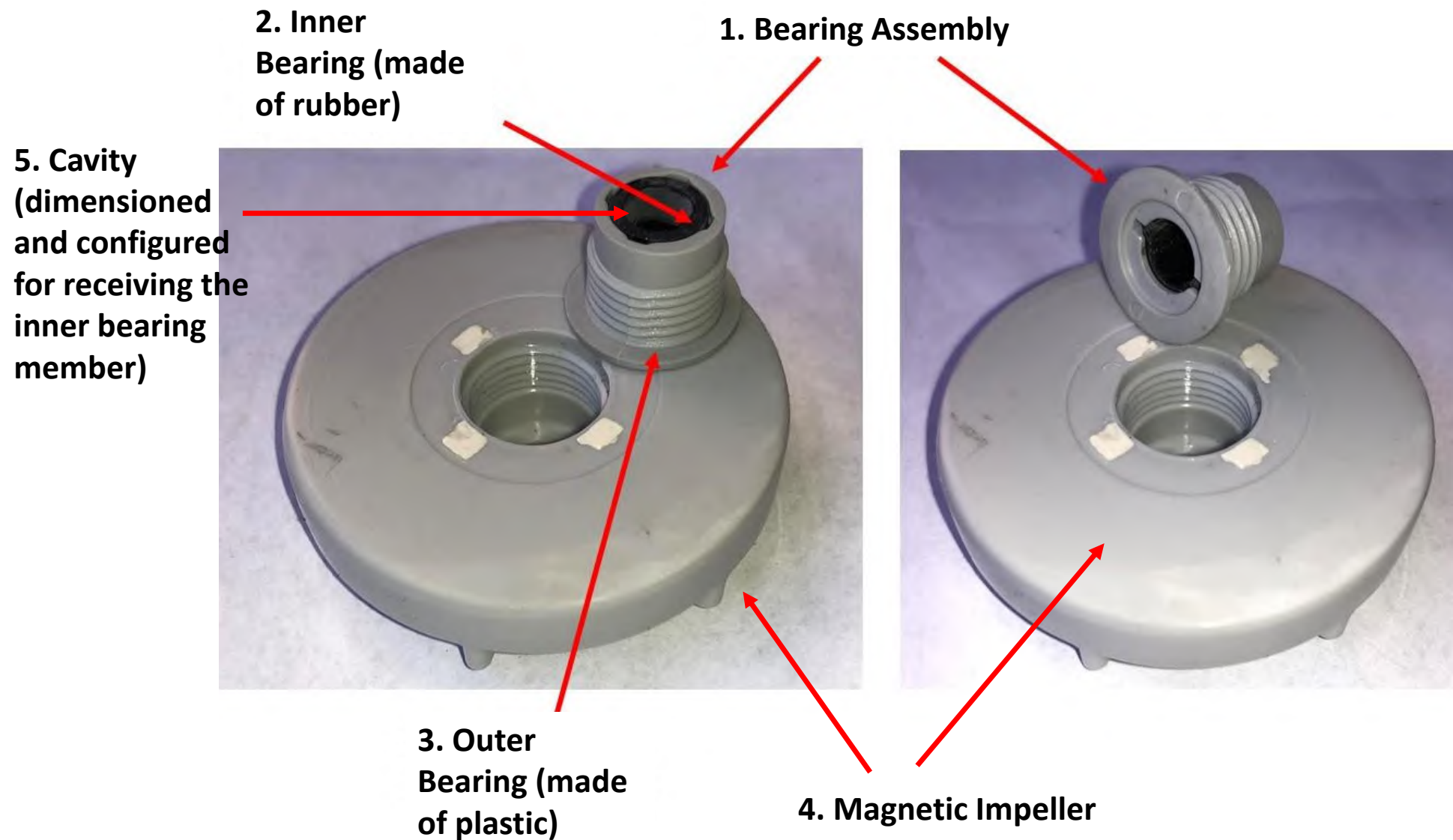
**5. Shaft Member
(extends though top
surface and bottom
surface of Base of Jet
Assembly)**



Shaft Assembly & Bearing Assembly

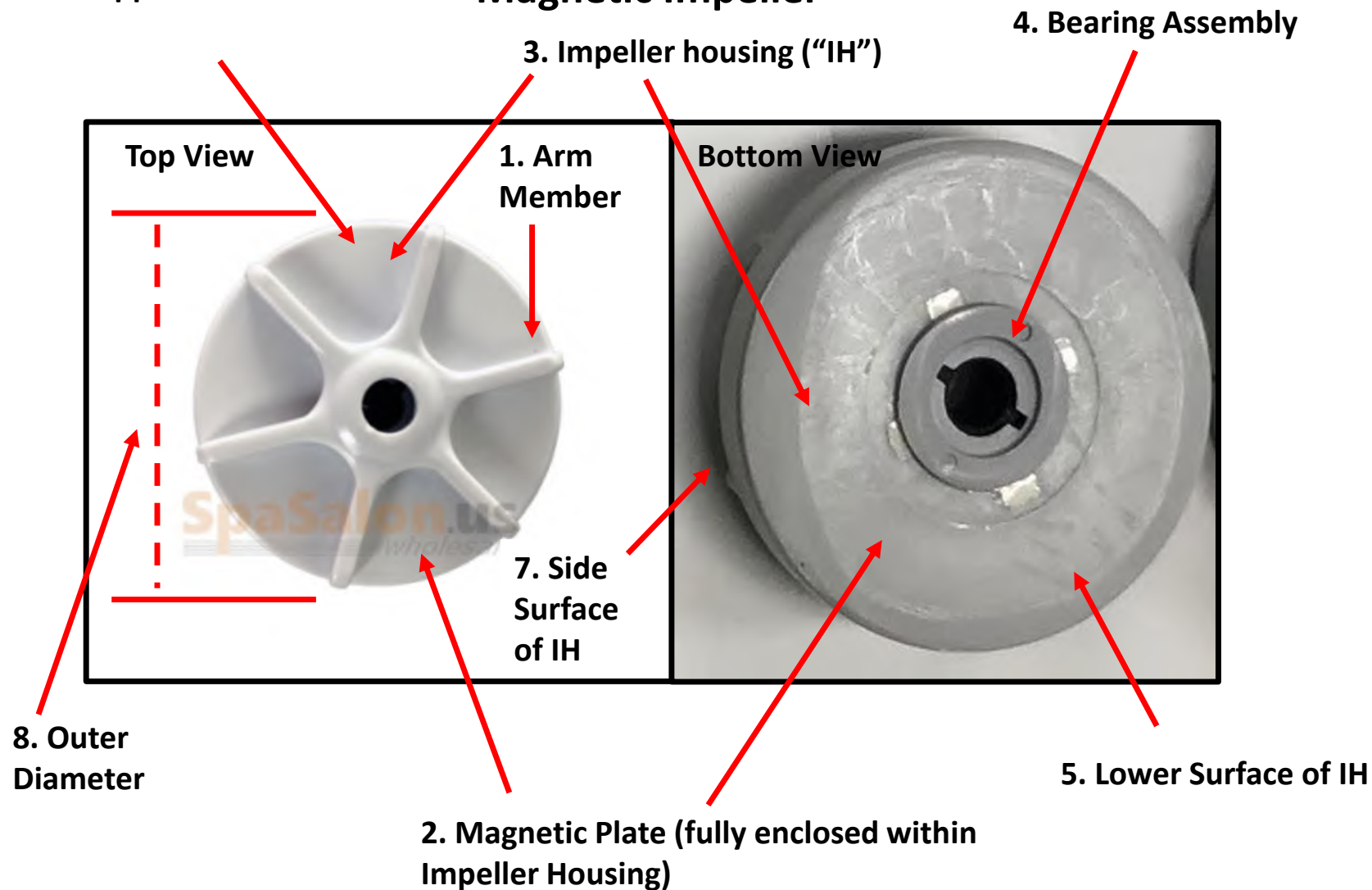
2. Shaft Protection Member
comprising of a base (made
of ceramic)

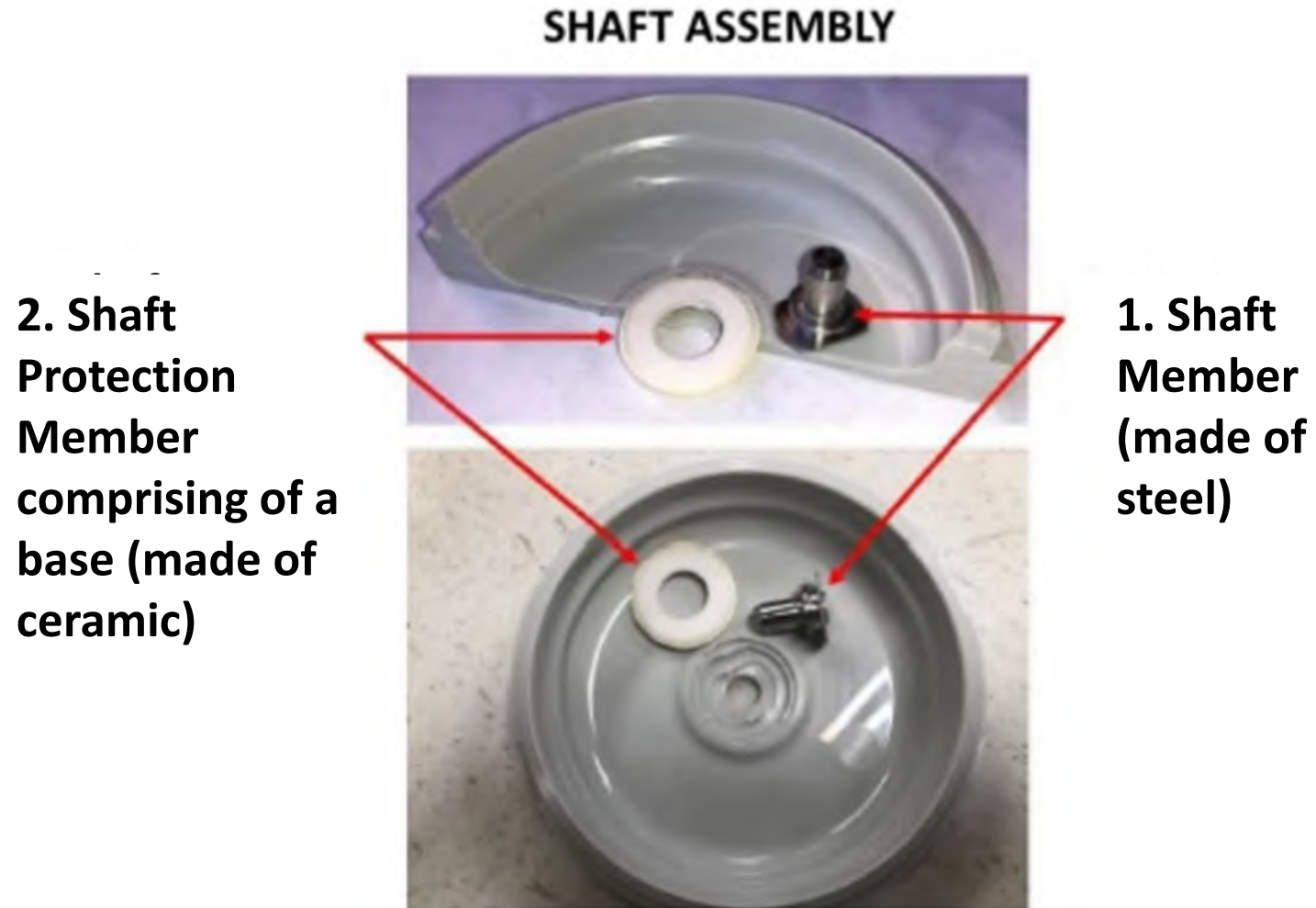




6. Upper Surface of IH

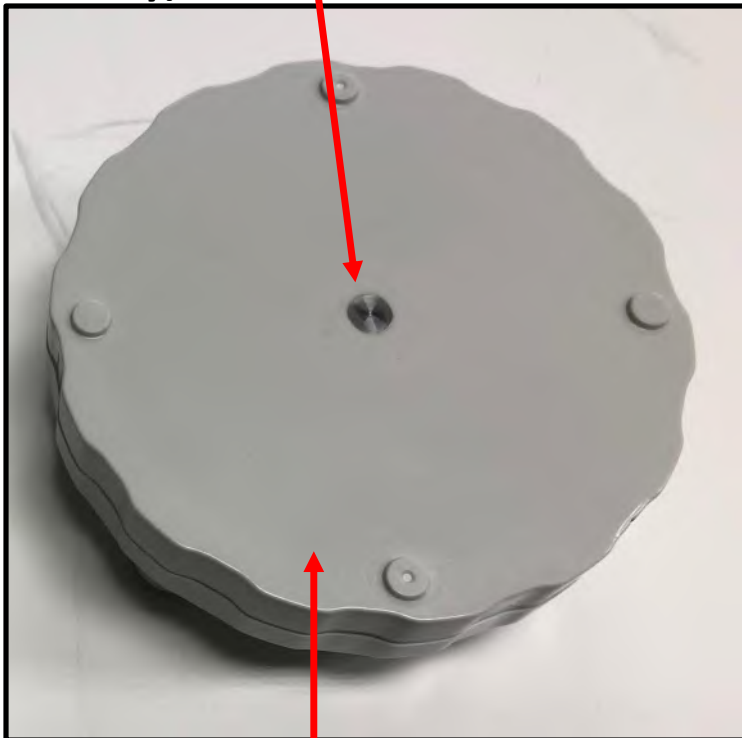
Magnetic Impeller





3. Shaft Member (extends though top surface and bottom surface of Base of Jet Assembly)

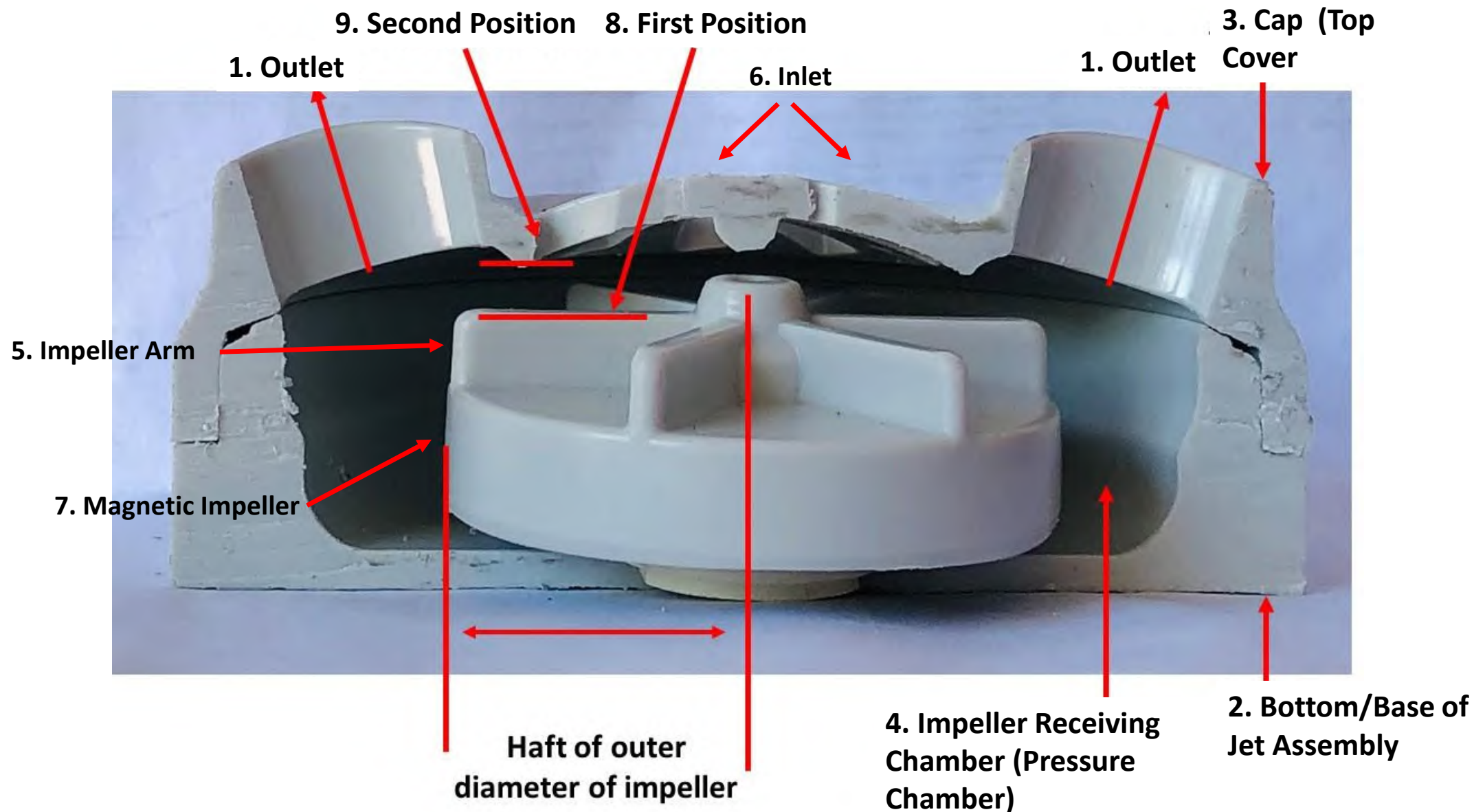
3. Shaft Member (made of steel)

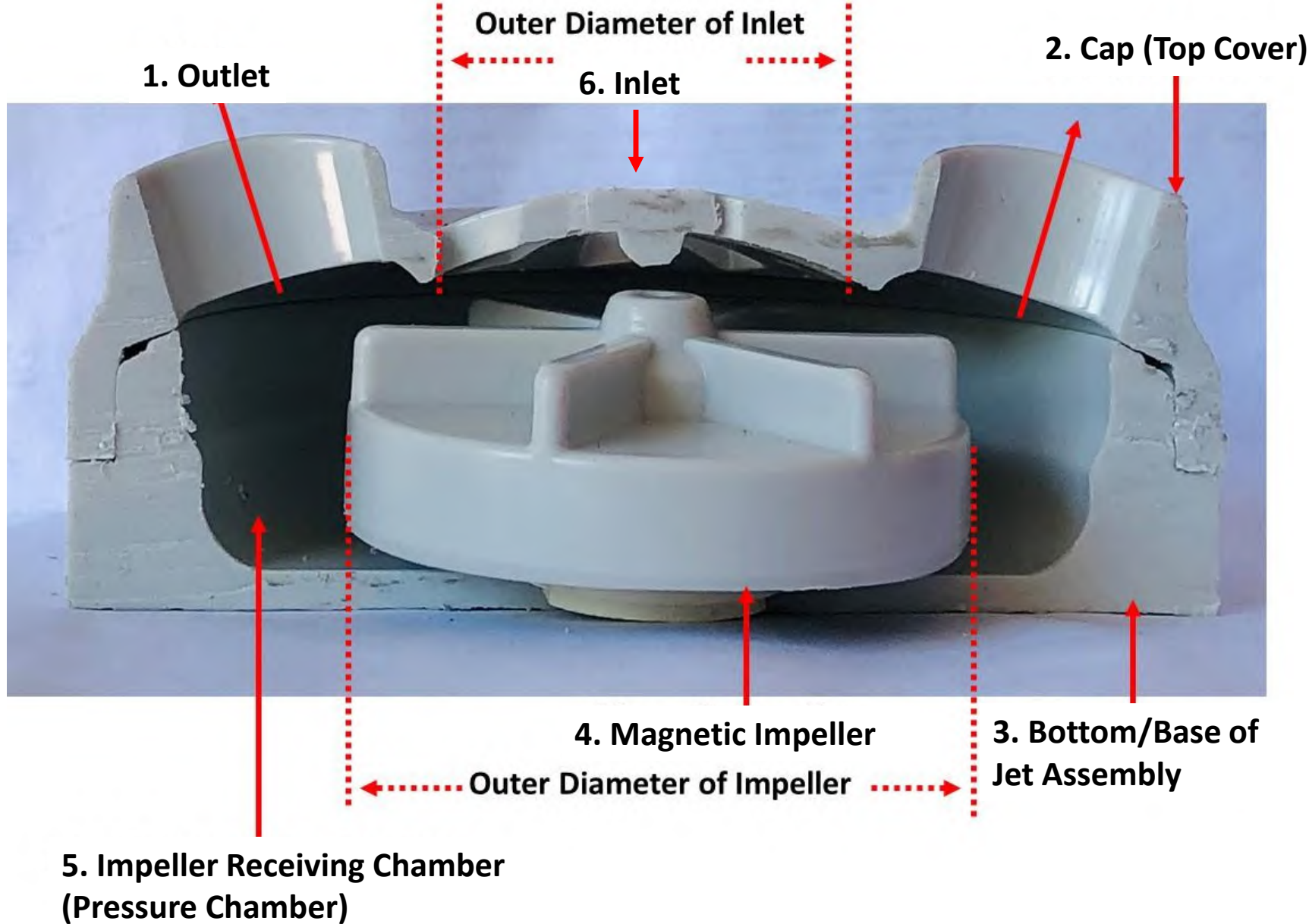


1. Outer surface of Base of Jet Assembly




2. Inner surface of Base of Jet Assembly





prospadepot.com/ecojet-magnetic-ii.html

Norred law Time Sh... Dashboard - MyCase





Pedicure Spa & Salon Furniture Wholesaler

(714) 444-4144

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US FIND DEALERS


HOME / ACCESSORIES / WHIRLPOOL JET / ECOJET MAGNET DRIVE JET / ECOJET II MAGNETIC DRIVE



Product Code: Ecojet II Magnetic Drive

ECOJET II MAGNETIC DRIVE

Add to Wishlist | Add to Compare




DETAILS

Patented Ecojet II with Magnetic-Drive will provide a strong soothing whirlpool, easy to clean and extremely reliable. Use together with PSD Disposable Liner will bring sanitary pedicure service to a whole new level. The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized and Utilities Patented (3,272,079). This magnetic jet is assembled and tested in the U.S.A.

Retail box includes:

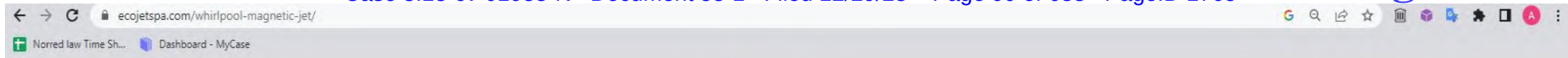
- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card

VIDEO



Watch on YouTube | www.ecojetspa.com

RELATED PRODUCTS



HOME PRODUCTS CONTACT INFO FIND DEALERS SUPPORT

Universal Whirlpool Magnetic Jet System

(Designed for Pedicure Spa Chairs).

The Ecojet Magnetic Drive Jet takes "sanitary" to the next level. This jet system is highly efficient and reliable. With a one- year warranty, Ecojet U.L recognized, assembled & tested in the USA.

This kit is designed with advanced technology that increases the product longevity and durability. Our goal is to create the best performing whirlpool jet among competitors and most spa chairs in the market is now coming with universal fitment. The Ecojet Magnetic Drive Jet is now comes with universal fitment that fits most magnetic jets cutout for the Ecojet Universal Adapter is 3.5 inches. Any larger opening will have leakages (Please reference manual for further instructions).

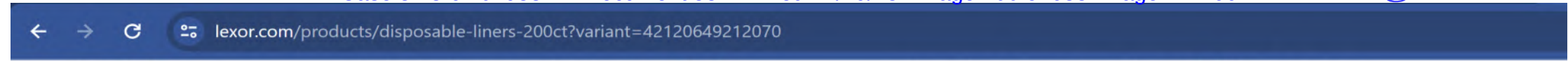
The Ecojet MD package Includes:

- Ecojet® MD Magnetic Motor
- Replacement Bushing Kit
- Motor Mounting Lever
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet® Cap Cover
- AC Power Cord



Home About Us Find Dealers Terms & Conditions

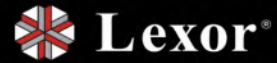
Get in touch with us →



age Starts At **\$2495**

FREE SHIPPING For All Orders Over **\$5000**

Financing Interest Rate As Low As **1%** With Credit Key



PEDICURE CHAIRS

PROMOTIONS

SPECIAL FEATURES

SALON FURNITURE

PARTS & ACCESSORIES

SHOWROOMS



Disposable Liners (200ct)

EcoJet

\$25.00

From \$2.31/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

ADD TO CART

BUY IT NOW


APPLY FOR FINANCING

SEE PROMOS

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.


← → ↻ ⓘ Not secure | lxsalons.com/product/liberte/

 **Lexor®**
THE KEY TO SALON SUCCESS.


Home Pedi-Spa Furniture Parts Promo Explore

Smart Features


SHARE



ECOJET™ Magnetic Drive
Distinctively designed to operate stronger, quieter and cooler to withstand long hours of usage in a typical nail salon, Ecojet is UL listed and backed with 2 U.S. utility patents giving you and your clients confidence in choosing a sanitary and efficient pedicure service.



ECOJET™ Disposable Liner
Your clients will appreciate the extra care taken to bring them a more sanitary experience from using disposable liners.

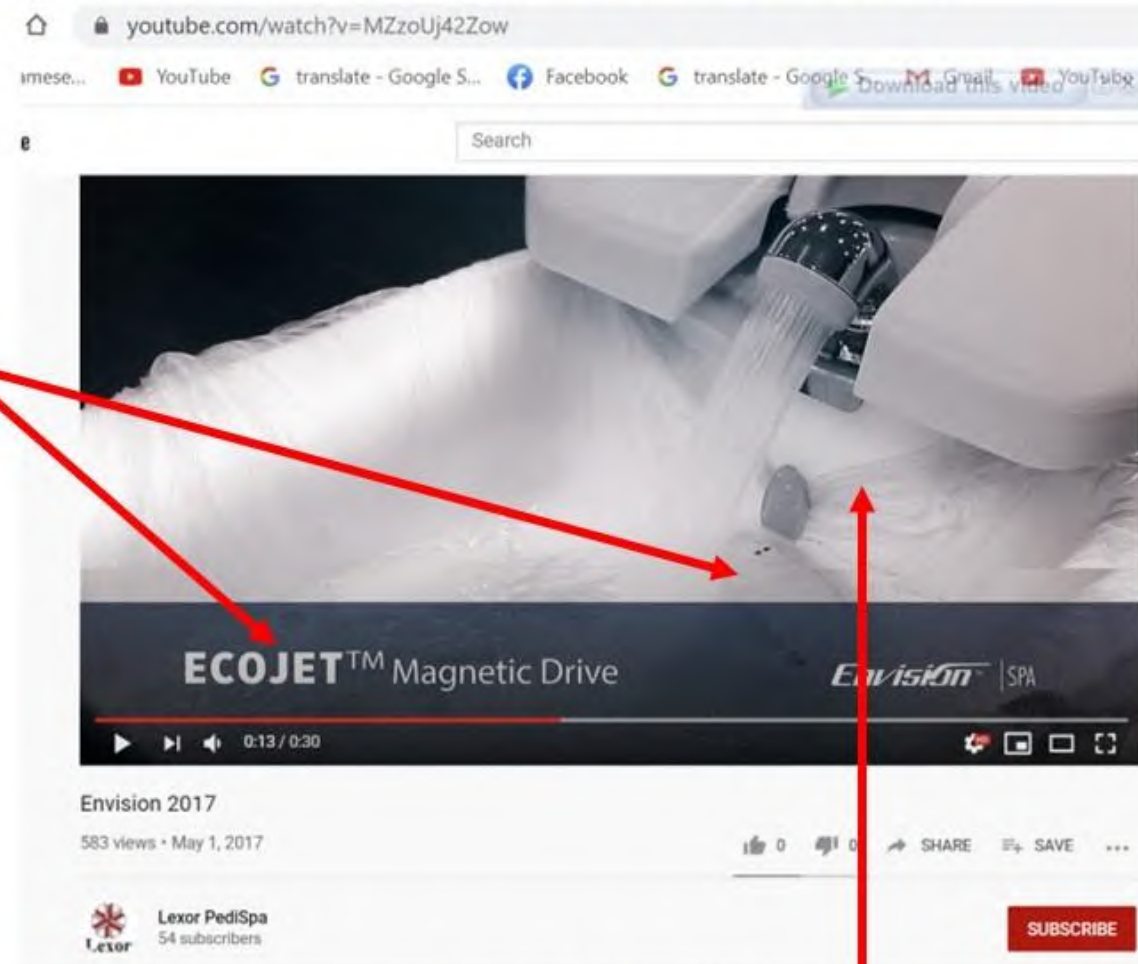


NEW EcoAir™ Ver
Easily attach your salt and nail stations with

Liner

<https://www.youtube.com/watch?v=MZzoUj42Zow> (Second 13 shows EcoJet)

EcoJet

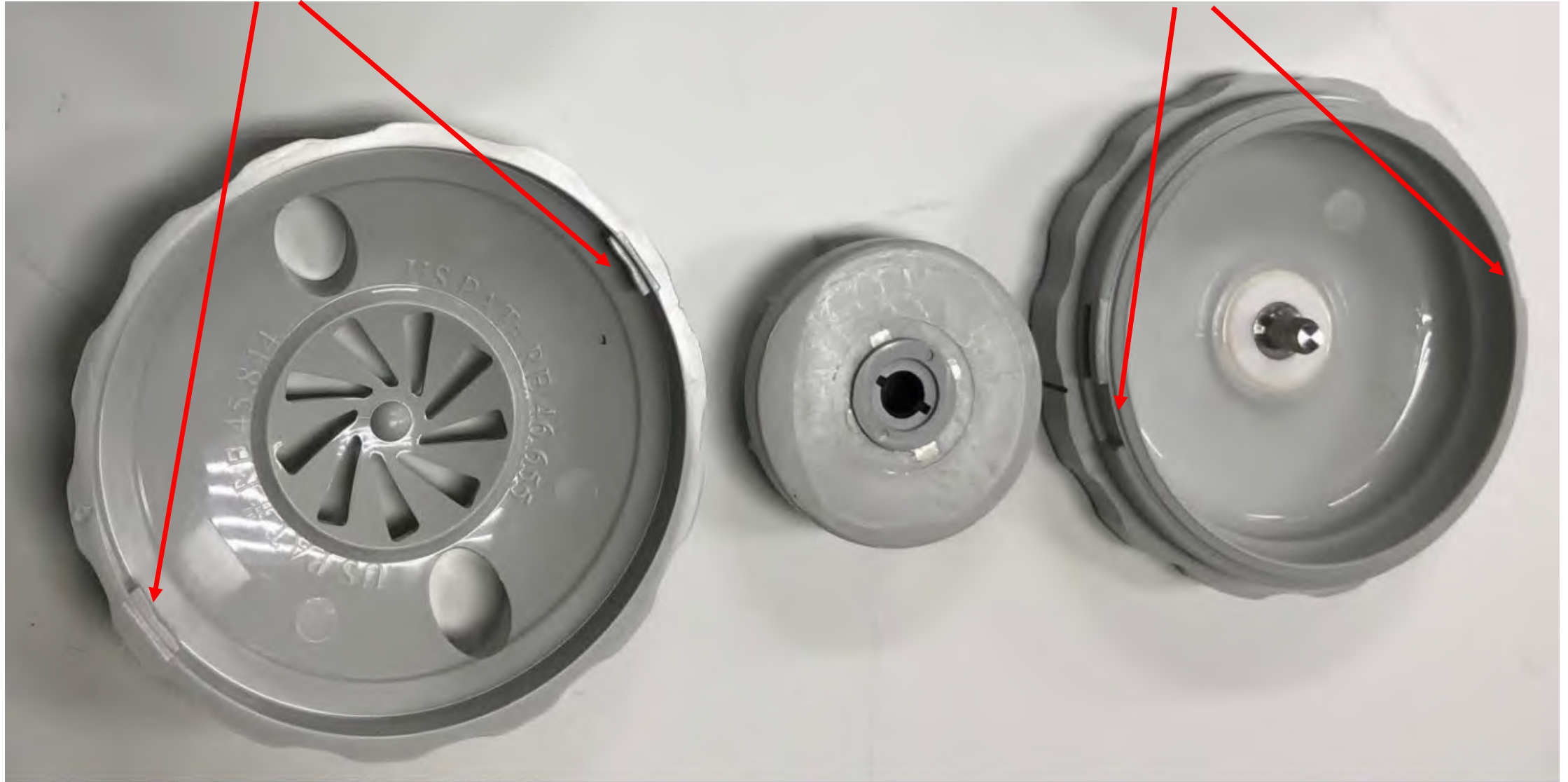


(Cropped on Oct 19, 2020)

Liner

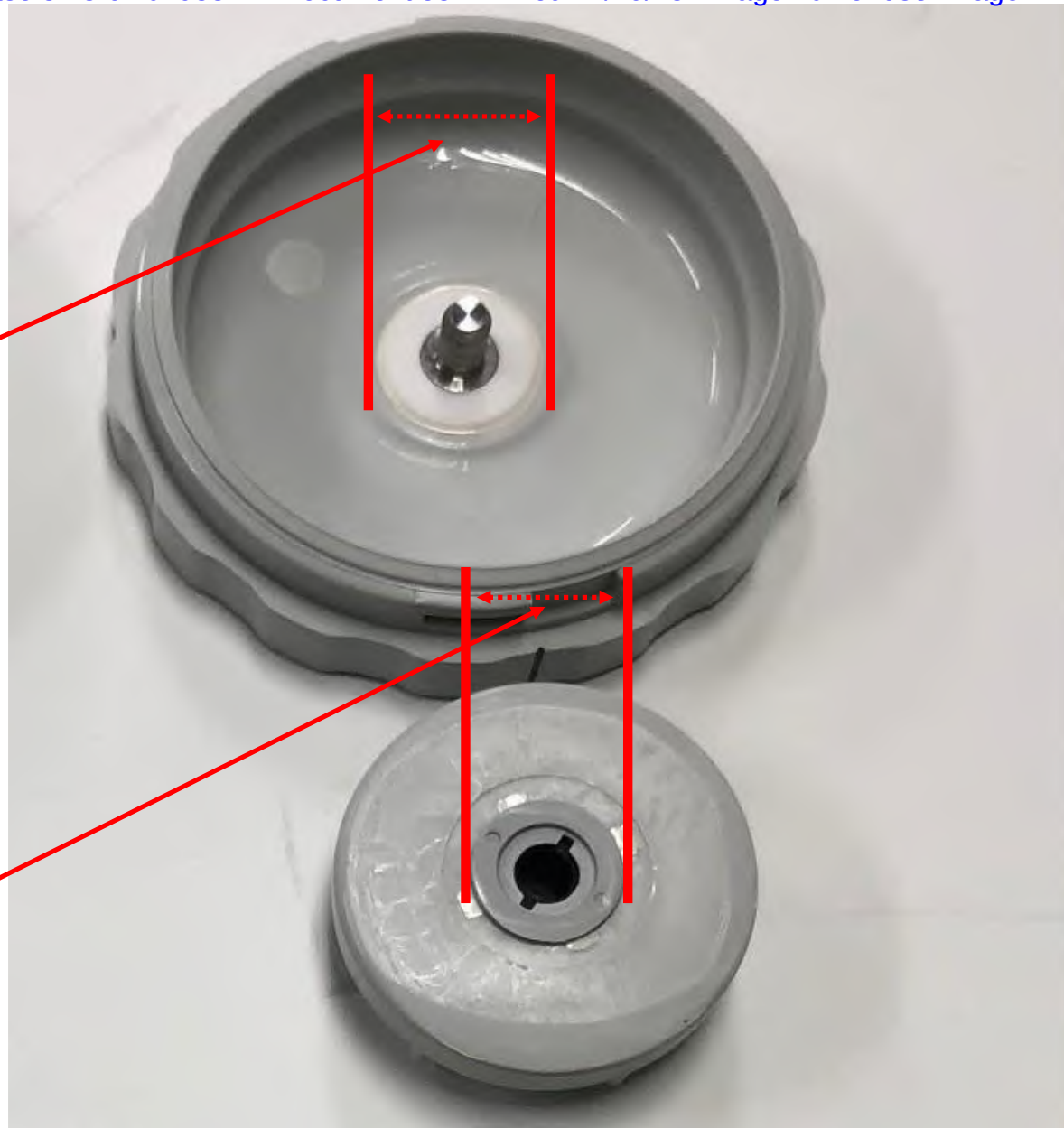
1. Engagement Member

1. Engagement Member



**1. Outer diameter
of Shaft Protection
Member**


**2. Outer diameter
of Outer Bearing
Member**



lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES




ELITE Pedicure Chair


MODEL CODE | SKU : 100079

SALE


\$2,495.00

MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair ▼

QTY. - 1 +

Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

53\"/74\" (Upright / Reclined) **31\"/47\"** (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (optional)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

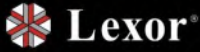
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 📄 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW




PRIVÉ Lounge Pedicure Chair


PROMOTION

\$4,495.00


MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: *IVORY*



BASE COLOR: *BLACK MOONSTONE*

MODEL **PRIVÉ Lounge Pedicure Chair** ▾

QTY.

Order a complete 5-piece package with a matching n

lexor.com/products/prive-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 71
- HEIGHT (Upright/Reclined): 84
- WIDTH (Trays Closed/Open): 34/49
- Weight (lb.): 350
- Water Capacity (gal.): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

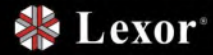
FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495**

FREE SHIPPING For All Orders Over **\$5000**

[PEDICURE CHAIRS](#)[PROMOTIONS](#)[SPECIAL FEATURES](#)[SALON FURNITURE](#)[PARTS & ACCESSORIES](#)[SHOWROOMS](#)

ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,900.00~~

From \$231/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: DARK WALNUT

MODEL ENVISION Pedicure Chair

QTY. - 1 +

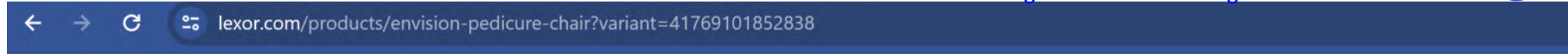
ADD TO CART

BUY IT NOW

APPLY FOR FINANCING

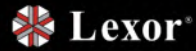
SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



FREE SHIPPING For All Orders Over \$5000

Financing Interest Rate As Low As 1% With Credit Key



PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

**SPECIFICATION**

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests *(for easy access)*
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

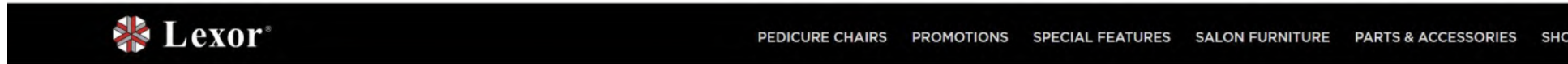
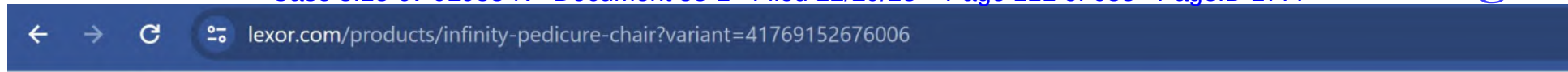
// DIMENSIONS *(in.)*

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight *(lb.)*: 260
- Water Capacity *(gal.)*: 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining:
 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE



INFINITY Pedicure Chair

SALE

\$1,995.00

MSRP: ~~\$2,795.00~~

From \$185/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART

BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

L 53\"/74\" (Upright / Reclined) **W 31\"/47\"** (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

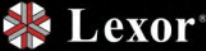
FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A


(Power needed per spa chair: 6 Amp)

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**


 **Lexor®**


PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO




LIBERTÉ Pedicure Chair

SALE
\$2,395.00
MSRP: ~~\$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL LIBERTÉ Pedicure Chair ▾

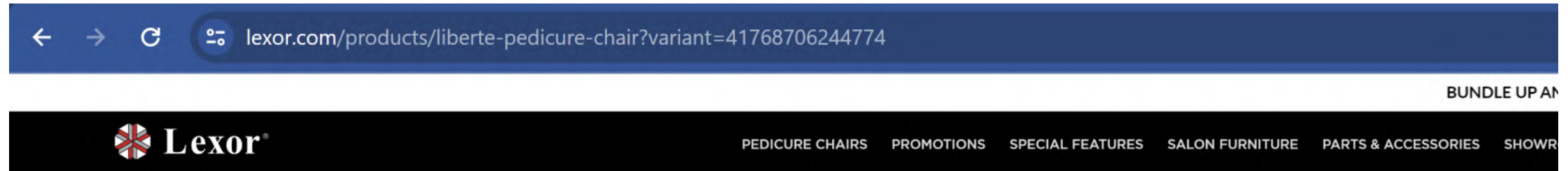
QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (*in.*)

- LENGTH (**Upright**/Reclined): **53/74**
- HEIGHT (**Upright**/Reclined): **56/52**
- WIDTH (**Trays Closed**/Open): **31/47**
- **Weight** (*lb.*): **260**
- **Water Capacity** (*gal.*): **4**

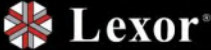
// ELECTRICAL


Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump: MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(*Power needed per spa chair: 6 Amp*)

LEXOR® CARE

← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

BUNDLE U

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRESTIGE Pedicure Chair

SALE


\$2,495.00

MSRP: ~~\$3,900.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



PEDI-BOWL COLOR: WHITE PEARL

MODEL PRESTIGE Pedicure Chair ▾

QTY. - 1 +

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

← → ↻ lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As 1% With Credit Key

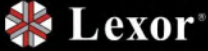
Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS


SPECIFICATION

<p>// DESIGN</p> <ul style="list-style-type: none"> • AURORA® Color-changing LED Bowl • Elegant Burlwood & Chrome Accents • Foldable Manicure Trays with Cup/Phone Holders • Lift-up Arm-rests <i>(for easy access)</i> • Acetone-resistant ULTRALEATHER® Chair Top • Acetone-resistant Laminated Base & Gel Bowl • Durable Gel-coated Marble Composite Spa Base • Flushed-concept Handbag Hooks <p>// TECHNOLOGY</p> <ul style="list-style-type: none"> • ECOJET® Shaft-less® Universal Whirlpool Jet • AUTO-FILL™ Water Auto-Stop Sensor • DCS Digital Control System 	<p>// DIMENSIONS (in.)</p> <ul style="list-style-type: none"> • LENGTH (Upright/Reclined): 53/74 • HEIGHT (Upright/Reclined): 56/52 • WIDTH (Trays Closed/Open): 31/47 • Weight (lb.): 260 • Water Capacity (gal.): 4 <p>// ELECTRICAL</p> <p>Jet Motor: 120VAC at 85W 60Hz</p> <p>Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5</p> <p>Discharge Pump</p> <p>MOTOR: 120V AT 85W 60Hz</p> <p>MAX VERTICAL LIFT: 3 ft.</p> <p>FLOWRATE: 500 GPH At Floor Level</p> <p>Power Source: 115VAC, 60Hz, 15A <i>(Power needed per spa chair: 6 Amp)</i></p> <p>***LEXOR® CARE***</p>
--	---

← → ↻ 📄 lexor.com/products/luminous-pedicure-chair?variant=41753030033574


BUNDLE


 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO




LUMINOUS Pedicure Chair

SALE
\$2,195.00
MSRP: ~~\$2,995.00~~

From \$203/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL

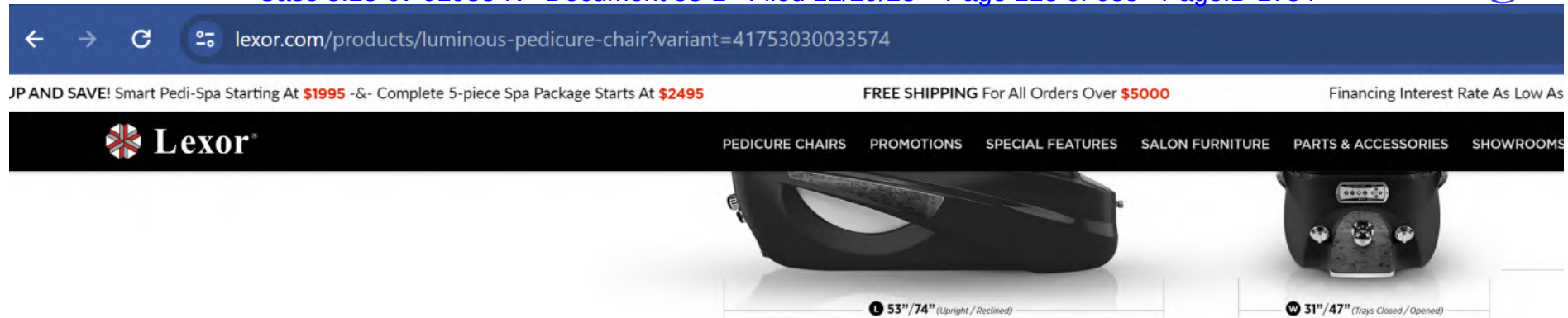
QTY.

Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (*for massage system & seat positioning*)
- 4-way Powered Chair Top

// DIMENSIONS (*in.*)

- LENGTH (**Upright/Reclined**): 53/74
- HEIGHT (**Upright/Reclined**): 56/52
- WIDTH (**Trays Closed/Open**): 31/47
- Weight (*lb.*): 260
- Water Capacity (*gal.*): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

(12) **United States Patent**
Le et al.

(10) **Patent No.:** **US 10,302,088 B2**
(45) **Date of Patent:** **May 28, 2019**

(54) **PUMP HAVING A CONTACTLESS, FLUID SENSOR FOR DISPENSING A FLUID TO A SETTING**

(58) **Field of Classification Search**
CPC .. F04D 13/026; F04D 13/024; F04D 13/0633;
F04D 13/064; F04D 29/0465;
(Continued)

(71) Applicants: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US);
Abhishek Vinod Vazrekar, Arlington,
TX (US); **Varad Nitin Gokhale**, Irving,
TX (US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,506,886 A 5/1950 Okulitch et al.
2,545,422 A 3/1951 Blom
(Continued)

(72) Inventors: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US);
Abhishek Vinod Vazrekar, Arlington,
TX (US); **Varad Nitin Gokhale**, Irving,
TX (US)

FOREIGN PATENT DOCUMENTS

CA 1286755 C 7/1991
CN 203396450 U 1/2014
(Continued)

(73) Assignee: **Luraco, Inc.**, Arlington, TX (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 339 days.

OTHER PUBLICATIONS

English Abstract of EP0149132A1, 1985 (Year: 1985).
(Continued)

(21) Appl. No.: **15/237,595**

Primary Examiner — Nathan C Zollinger

(22) Filed: **Aug. 15, 2016**

(74) *Attorney, Agent, or Firm* — Hoang Steve Ngo

(65) **Prior Publication Data**

US 2016/0348681 A1 Dec. 1, 2016

(57) **ABSTRACT**

A pump having a contactless, fluid sensor for dispensing a fluid to a setting and for use with a liner is disclosed. The pump includes a jet assembly, a motor assembly, and a contactless, fluid sensor. The pump may further include a mounting housing member, a gasket or seal, and a liner when a liner is not already present. The jet assembly is secured to or about the motor assembly. The jet assembly includes a jet assembly housing, and preferably also includes a printed circuit board (PCB), a PCB cover, a shaft assembly, and an impeller. The jet assembly housing includes a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture. The present invention is also directed to a pump apparatus that includes a pump as described, a power source, and/or a control apparatus.

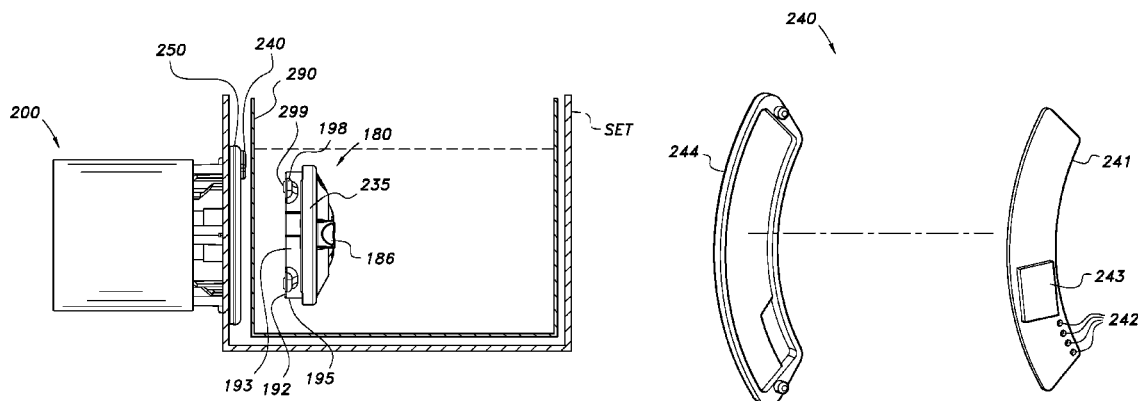
Related U.S. Application Data

(63) Continuation-in-part of application No. 13/923,364,
filed on Jun. 20, 2013, now Pat. No. 9,926,933.

(51) **Int. Cl.**
A61H 33/00 (2006.01)
F04D 13/02 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC **F04D 13/024** (2013.01); **F04D 13/026**
(2013.01); **F04D 13/0633** (2013.01);
(Continued)

70 Claims, 18 Drawing Sheets



US 10,302,088 B2

Page 2

- (51) **Int. Cl.**
F04D 13/06 (2006.01) 8,380,355 B2 2/2013 Mayleben
F04D 25/02 (2006.01) 8,531,048 B2 * 9/2013 Tran A01K 63/047
F21V 19/00 (2006.01) 8,657,583 B2 2/2014 Ward 290/1 R
F04D 29/046 (2006.01) 8,662,848 B2 3/2014 Tran
F04D 29/047 (2006.01) 8,936,444 B2 1/2015 Drechsel et al.
F21Y 115/10 (2016.01) 8,944,786 B1 2/2015 McDougall
9,220,657 B2 12/2015 Stauber et al.
9,450,475 B2 9/2016 Zumstein
9,551,343 B2 1/2017 Marks et al.
9,572,747 B2 2/2017 Tran et al.
9,926,933 B2 3/2018 Le et al.
10,219,977 B2 * 3/2019 Tran A61H 35/006
2005/0045621 A1 3/2005 Chenier et al.
2005/0262627 A1 12/2005 Chen
2006/0096021 A1 5/2006 Hutchings
2007/0101489 A1 5/2007 Hutchings
2008/0035427 A1 2/2008 Fowler
2008/0229819 A1 9/2008 Mayleben et al.
2009/0064406 A1 3/2009 Lawyer et al.
2009/0094736 A1 * 4/2009 Booth A61H 33/6063
417/420
- (52) **U.S. Cl.**
CPC **F04D 25/026** (2013.01); **F04D 29/047**
(2013.01); **F04D 29/0465** (2013.01); **A61H**
33/0091 (2013.01); **A61H 2033/0083**
(2013.01); **A61H 2201/1207** (2013.01); **F04D**
13/064 (2013.01); **F05B 2240/14** (2013.01);
F05B 2240/50 (2013.01); **F21V 19/003**
(2013.01); **F21Y 2115/10** (2016.08)
- (58) **Field of Classification Search**
CPC F04D 29/047; F04D 25/06; F04D 15/00;
F04D 15/02; F04D 29/005; A61H
2033/0083; A61H 33/0091; A61H
2201/1207; F05B 2240/14; F05B
2240/50; F21Y 2115/10; F21V 19/003
USPC 417/420
See application file for complete search history.
- (56) **References Cited**
2009/0094736 A1 * 4/2009 Booth F04D 5/002
417/420
2010/0074777 A1 3/2010 Laufer et al.
2010/0239435 A1 9/2010 Le et al.
2011/0004994 A1 1/2011 Le et al.
2011/0116948 A1 5/2011 Yi et al.
2011/0211982 A1 9/2011 Marks et al.
2011/0223047 A1 * 9/2011 Tran F04D 5/002
417/420
2011/0253236 A1 * 10/2011 Le F04F 5/10
137/565.22
- U.S. PATENT DOCUMENTS**
2,951,689 A 9/1960 Asp et al.
2,958,517 A 11/1960 Harker et al.
3,089,514 A 5/1963 Sudmeier
3,198,125 A 8/1965 Yuza et al.
3,299,819 A 1/1967 McCoy
3,411,450 A 11/1968 Clifton
3,572,651 A 3/1971 Harker
3,630,645 A 12/1971 Eheim
3,932,068 A 1/1976 Zimmermann
3,941,517 A 3/1976 Miyahara
4,082,380 A 4/1978 Klaus et al.
4,115,040 A 9/1978 Knorr
4,135,863 A 1/1979 Davis et al.
4,226,574 A 10/1980 Villette
4,304,532 A 12/1981 McCoy
4,312,752 A 1/1982 Malik
4,331,496 A 5/1982 Orndorff, Jr. et al.
4,513,735 A 4/1985 Friedson et al.
4,523,580 A 6/1985 Tureaud
4,569,337 A 2/1986 Baumann et al.
4,606,698 A 8/1986 Clausen et al.
4,716,605 A 1/1988 Shepherd et al.
4,875,497 A 10/1989 Worthington
4,982,461 A * 1/1991 Mikiya A61H 33/6063
417/420
- FOREIGN PATENT DOCUMENTS**
CN 104897239 A 9/2015
CN 204758082 U 11/2015
CN 105592834 A 5/2016
EP 0149132 A1 * 7/1985 G01F 23/263
EP 0149132 5/1989
EP 2676652 12/2013
EP 2997950 A2 3/2016
GB 805539 A 12/1958
GB 2156218 A 10/1985
JP H0678858 3/1994
JP 2007263028 A 10/2007
WO WO2016059409 A2 4/2016
- OTHER PUBLICATIONS**
ANS Gspa F Pedicure Spa (<http://buynailsdirect.com/nails-salon-pedicure-spas/glass-sink-spas/ans-gspa-f-pedicure-spa.html>), Aug. 15, 2016.
ANS Magnet Liner Jet (ALJ) Pedicure Spa Jet—Complete Set (<http://buynailsdirect.com/ans-liner-jet-alj-pedicure-spa-jet-complete-set.html>), Aug. 15, 2016.
Auto-Fill Sensor 2.15 (<https://lexor.com/Store/Product/Auto-Fill-Sensor-2-15>), Aug. 15, 2016.
Lexus Pedicure Spa User Manual (<http://uspedicurespa.com/resources/lexor/luminous-spa-pedicure-chair-owner-manual.pdf>), Aug. 15, 2016.
Maestro Pedicure Spa Owner's Manual (www.universalcompanies.com/FetchFile.aspx?id=c1571259-e567-4fcc-a079 . . .), Aug. 15, 2016.
SpaEquip User Manual (which contains the Sanijet Pipeless Hydrotherapy, Pipeless Whirlpool Foot Bath Owner's Manual for Model: FB2-S115), revised Sep. 2004.
- 4,982,606 A 1/1991 Adamski et al.
5,145,323 A 9/1992 Farr
5,238,369 A 8/1993 Farr
5,245,221 A 9/1993 Schmidt et al.
5,414,878 A 5/1995 Booth
5,458,459 A 10/1995 Hubbard et al.
5,587,023 A 12/1996 Booth
5,980,112 A 11/1999 Matthews
5,992,447 A 11/1999 Miller et al.
6,732,387 B1 5/2004 Waldron
6,997,688 B1 2/2006 Klein et al.
7,108,202 B1 9/2006 Chang
7,111,334 B2 9/2006 Chen
7,168,107 B2 1/2007 Gruenwald
7,393,188 B2 7/2008 Lawyer et al.
7,432,725 B2 10/2008 Sieh et al.
7,440,820 B2 10/2008 Gougerot et al.
7,574,756 B2 8/2009 Tran
7,593,789 B2 9/2009 Gougerot et al.
8,214,937 B2 7/2012 Lawyer et al.
8,296,874 B2 10/2012 Galati et al.

US 10,302,088 B2

Page 3

(56)

References Cited

OTHER PUBLICATIONS

Petra Collection Owner's Manual (which contains instructions for Sanijet-Pipeless System users), last updated Oct. 19, 2004, and copyright 2005.

Hanning document titled "Drain Pumps Synchronous Drain Pumps DPS/DPO," downloaded Aug. 24, 2016.

* cited by examiner

U.S. Patent

May 28, 2019

Sheet 1 of 18

US 10,302,088 B2

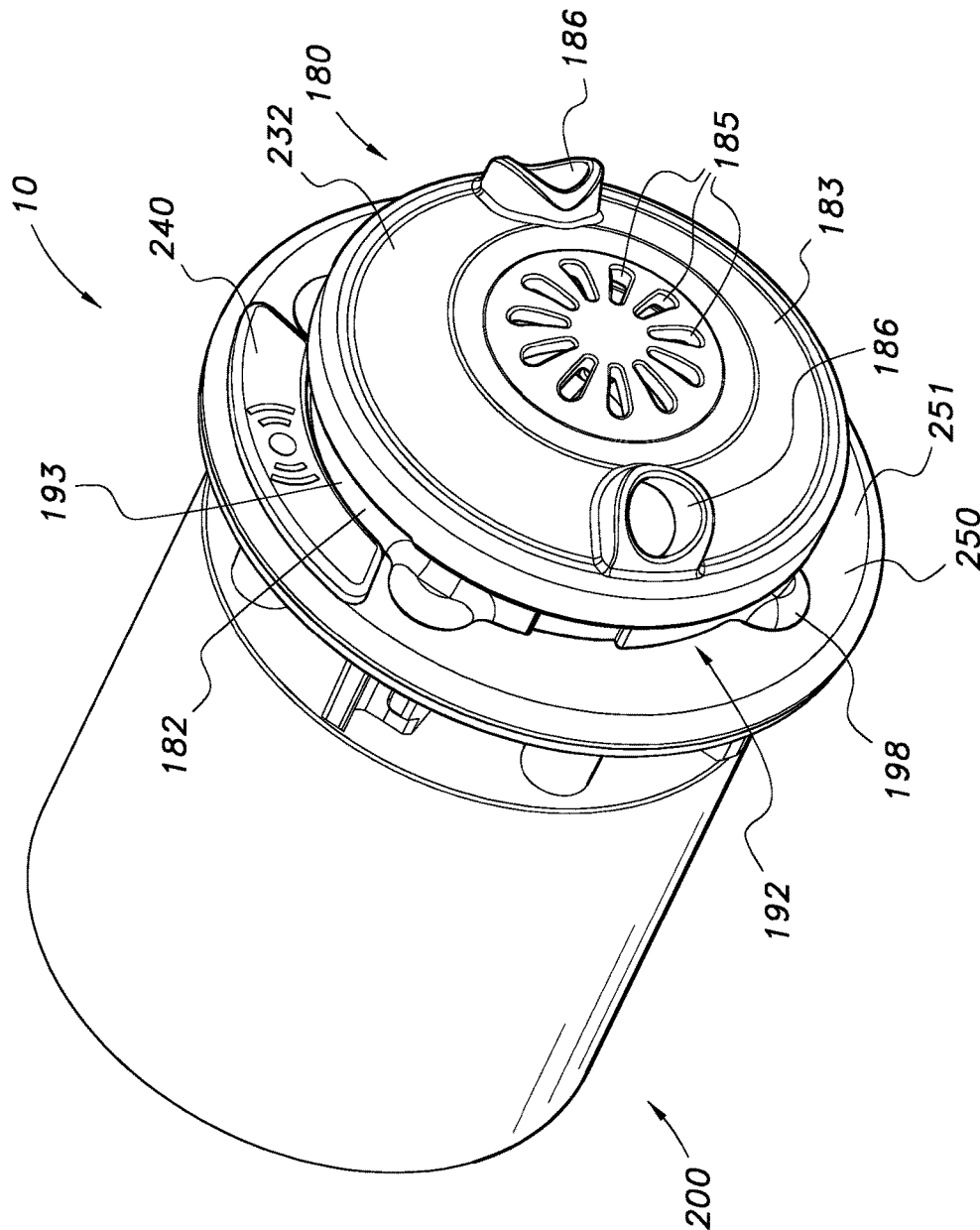


FIG. 1

U.S. Patent

May 28, 2019

Sheet 2 of 18

US 10,302,088 B2

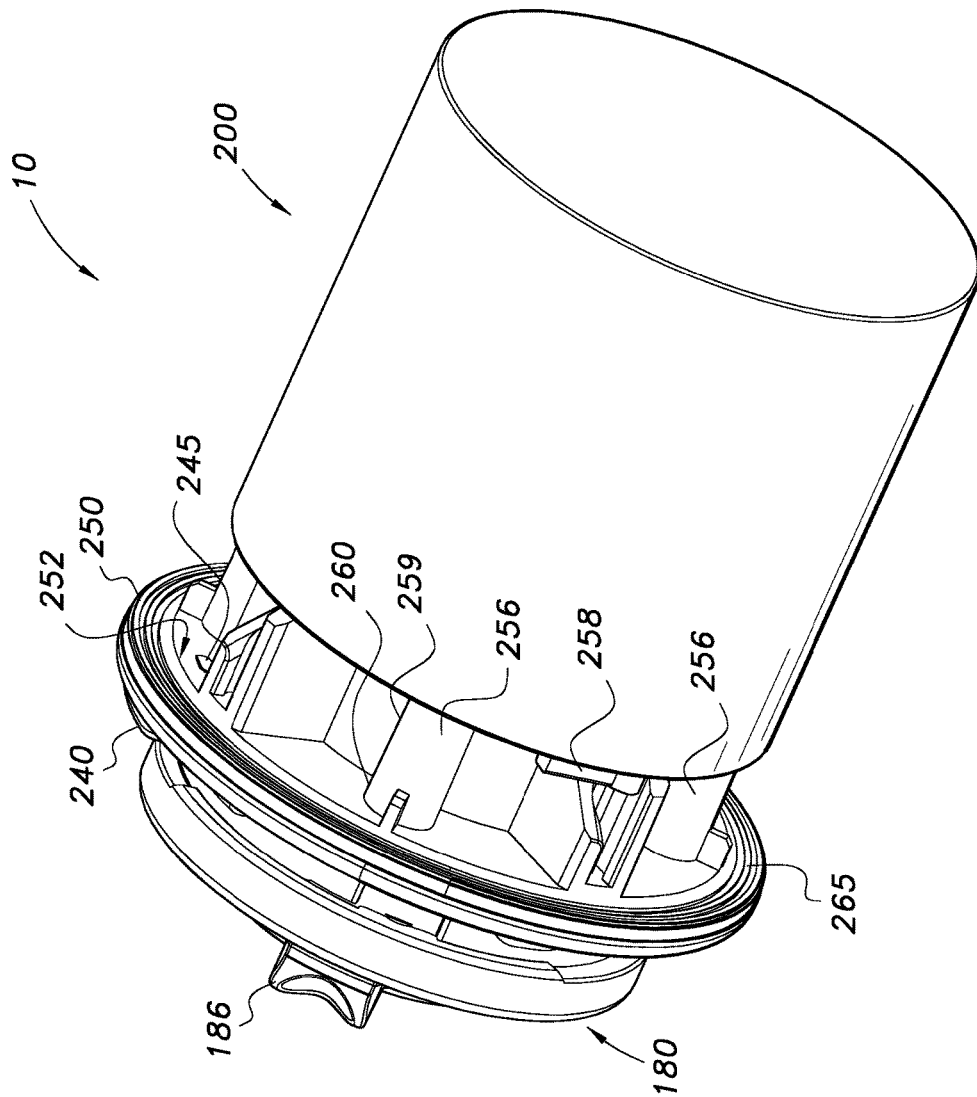


FIG. 2

U.S. Patent

May 28, 2019

Sheet 3 of 18

US 10,302,088 B2

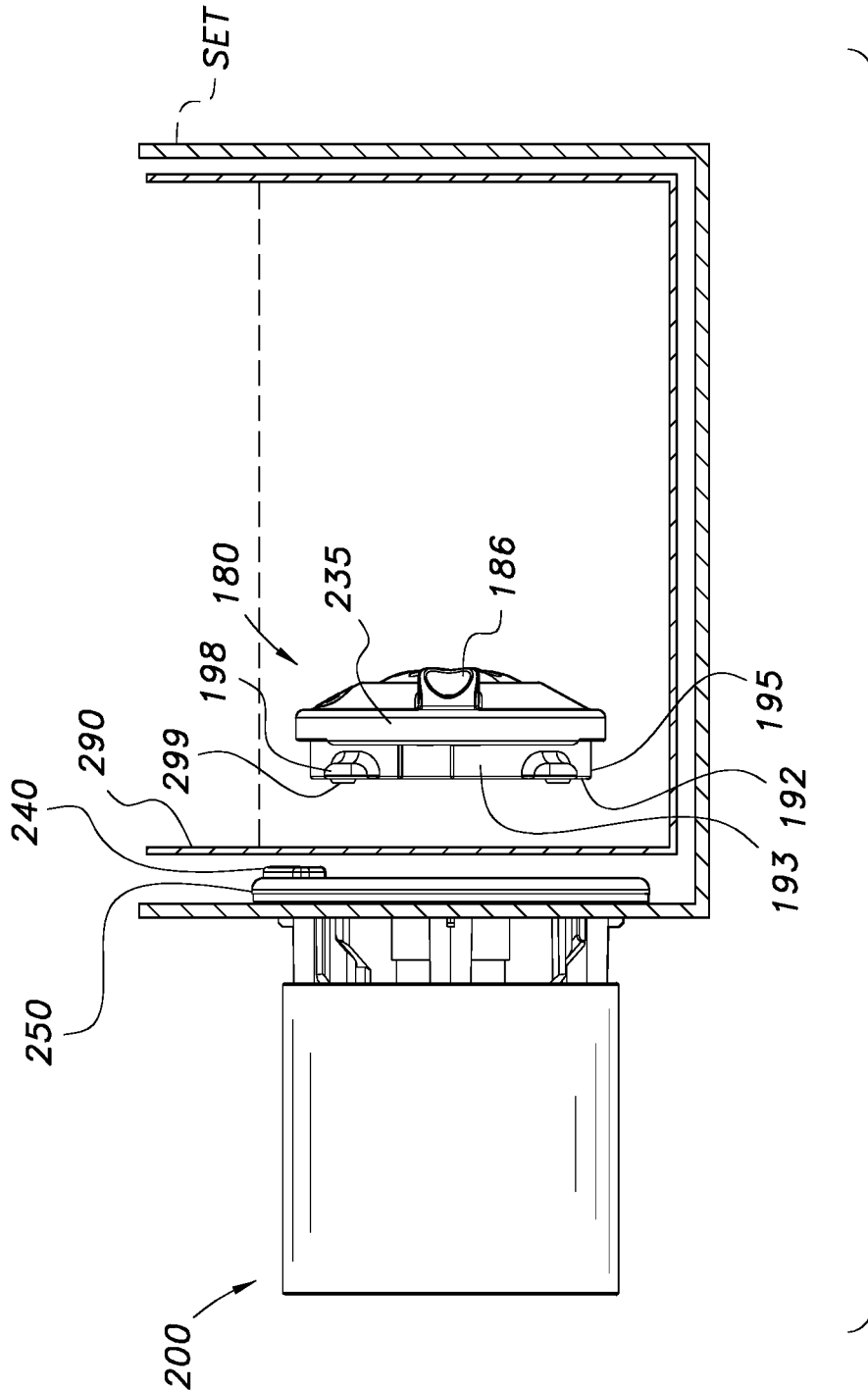


FIG. 3

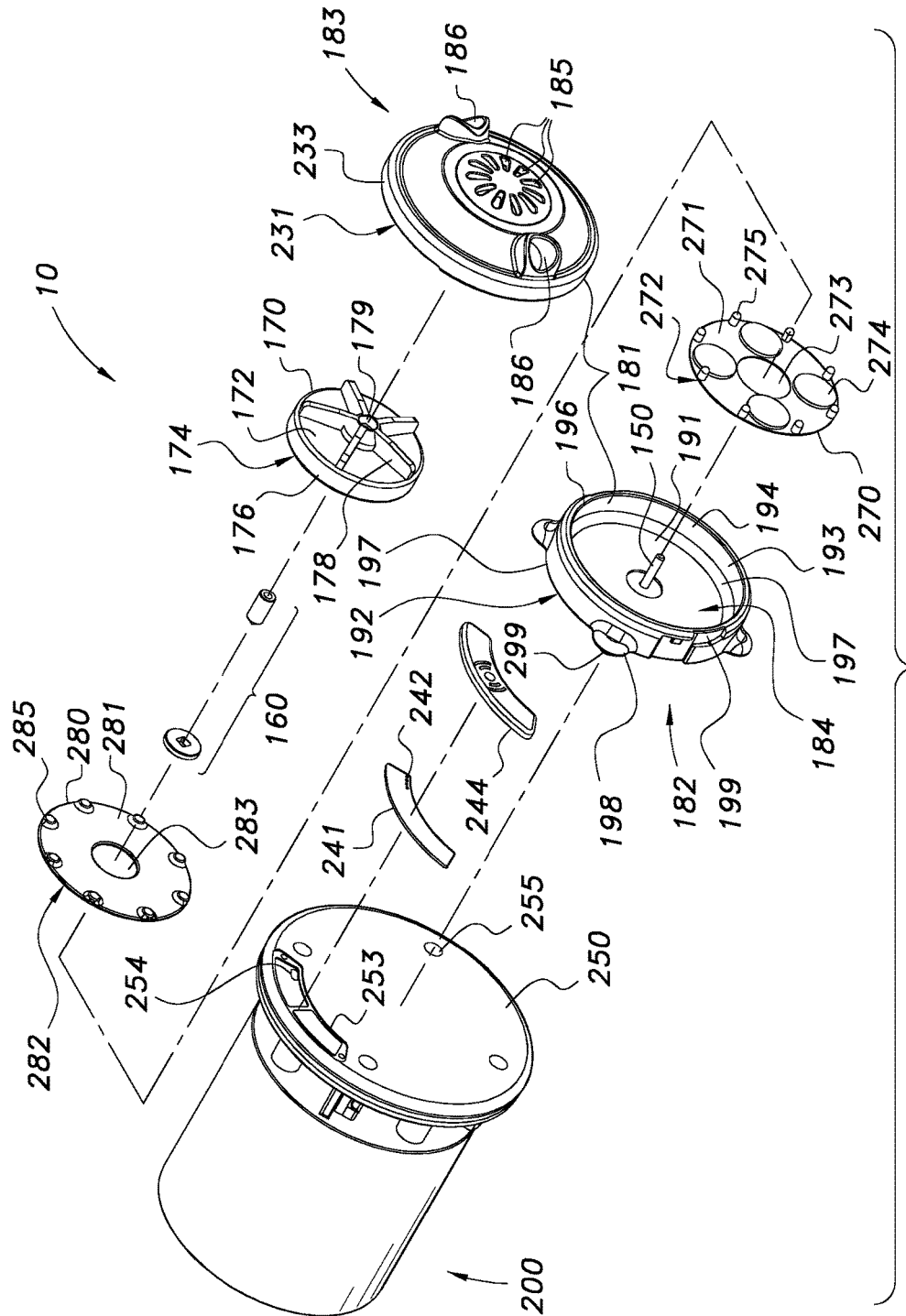


FIG. 4

U.S. Patent

May 28, 2019

Sheet 5 of 18

US 10,302,088 B2

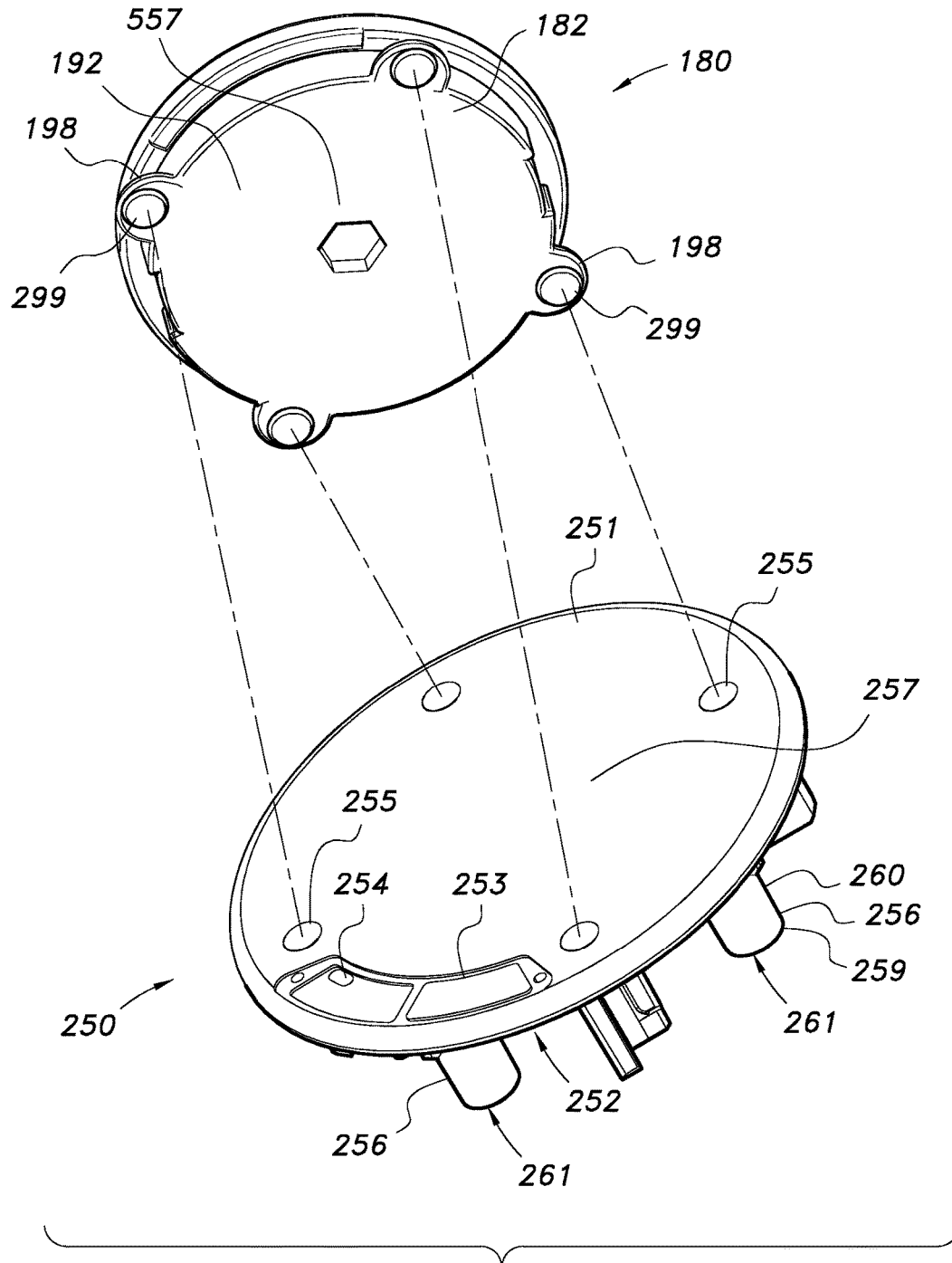


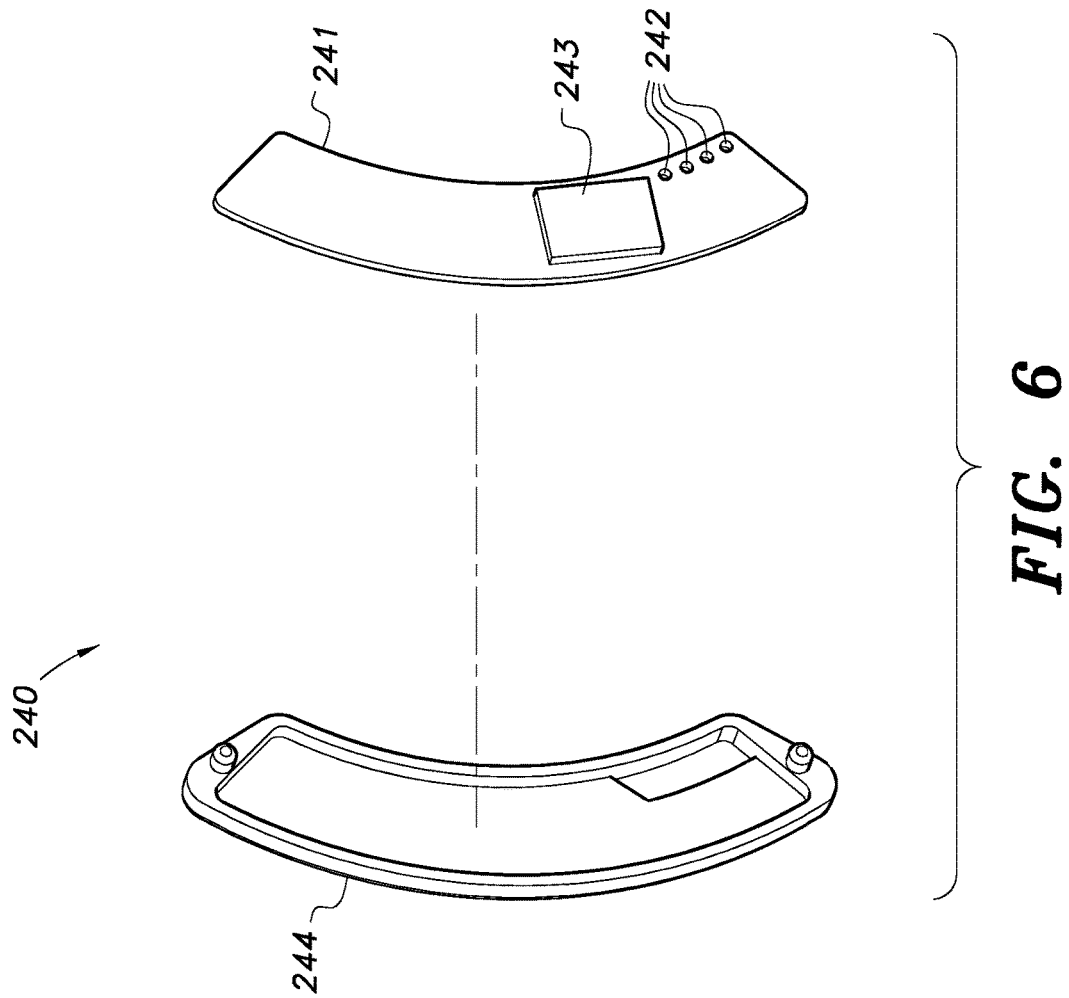
FIG. 5

U.S. Patent

May 28, 2019

Sheet 6 of 18

US 10,302,088 B2



U.S. Patent

May 28, 2019

Sheet 7 of 18

US 10,302,088 B2

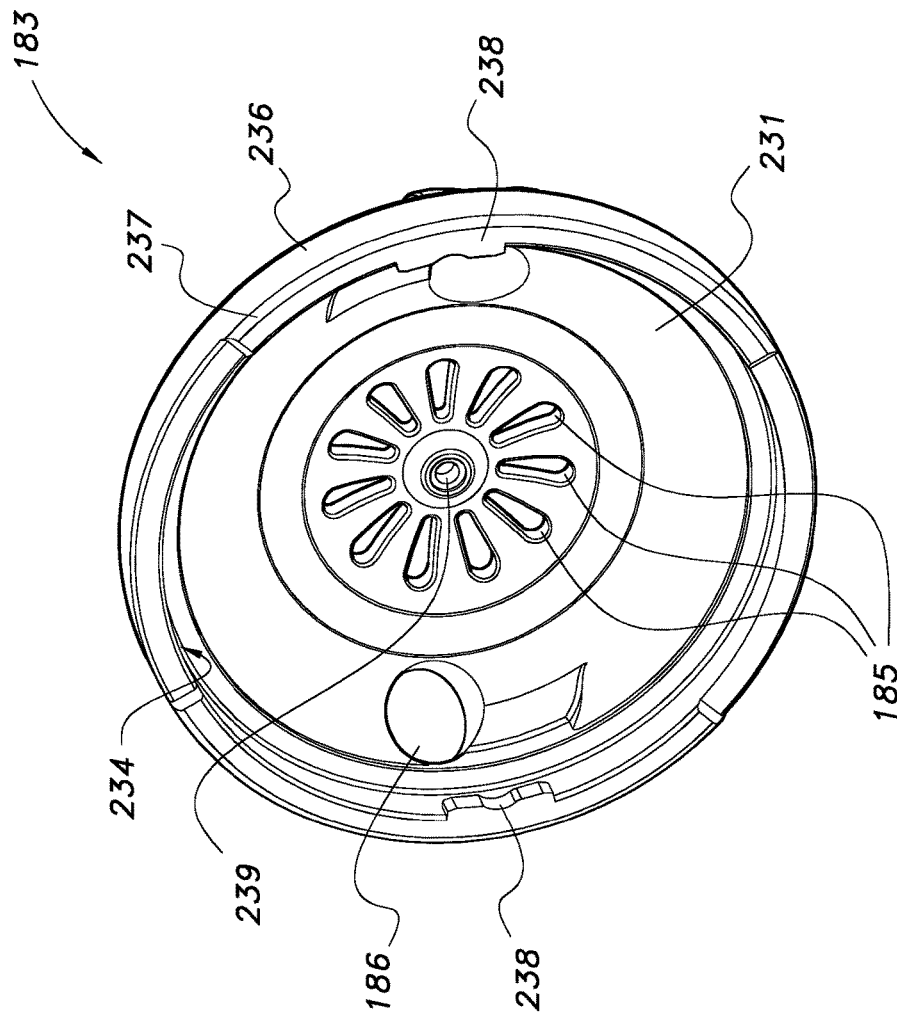


FIG. 7

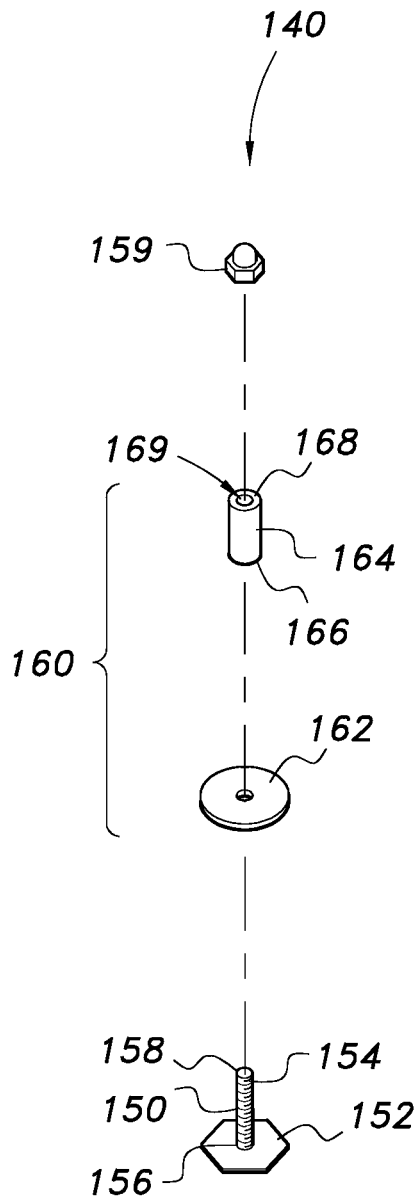


FIG. 8

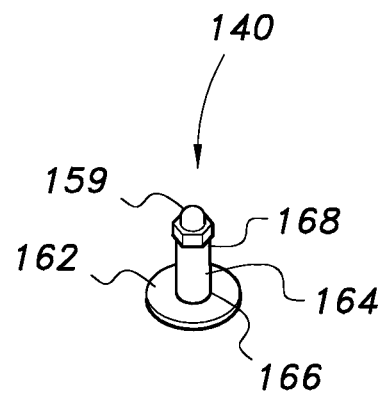


FIG. 9

U.S. Patent

May 28, 2019

Sheet 9 of 18

US 10,302,088 B2

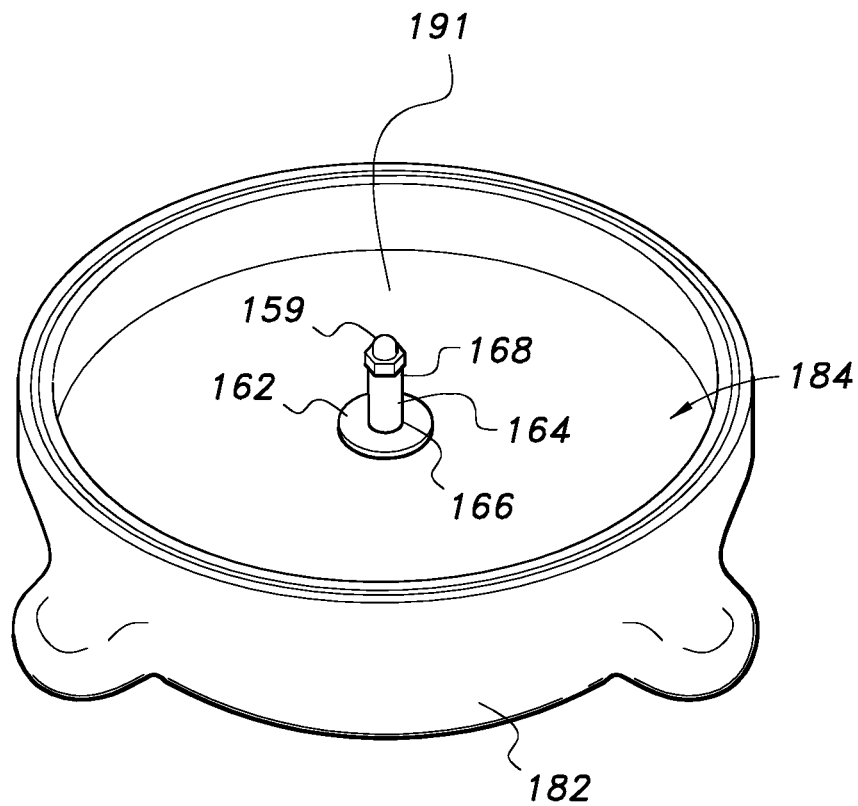


FIG. 10

U.S. Patent

May 28, 2019

Sheet 10 of 18

US 10,302,088 B2

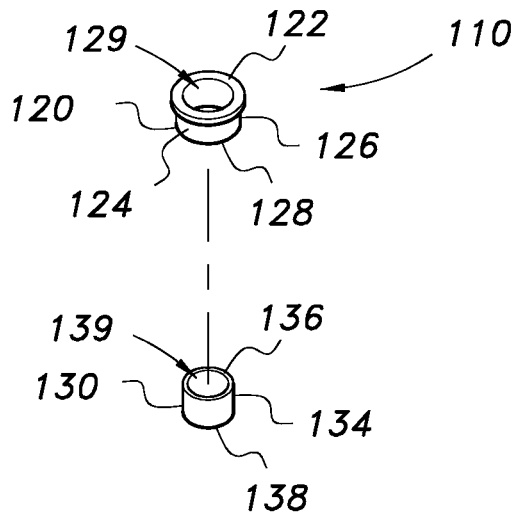


FIG. 11

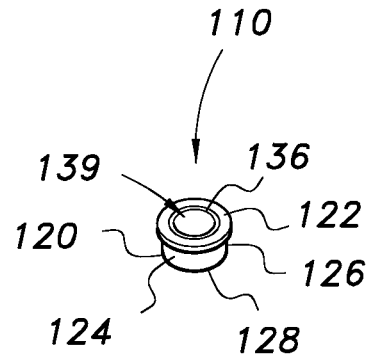


FIG. 12

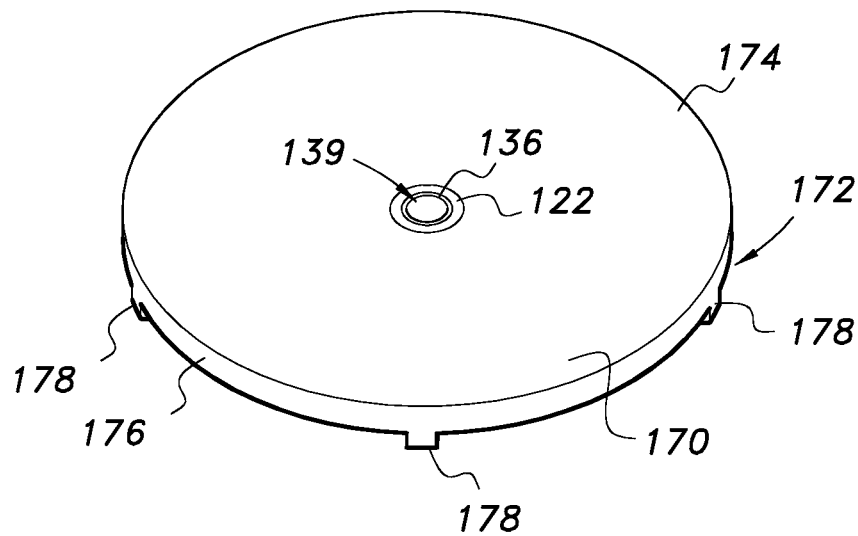


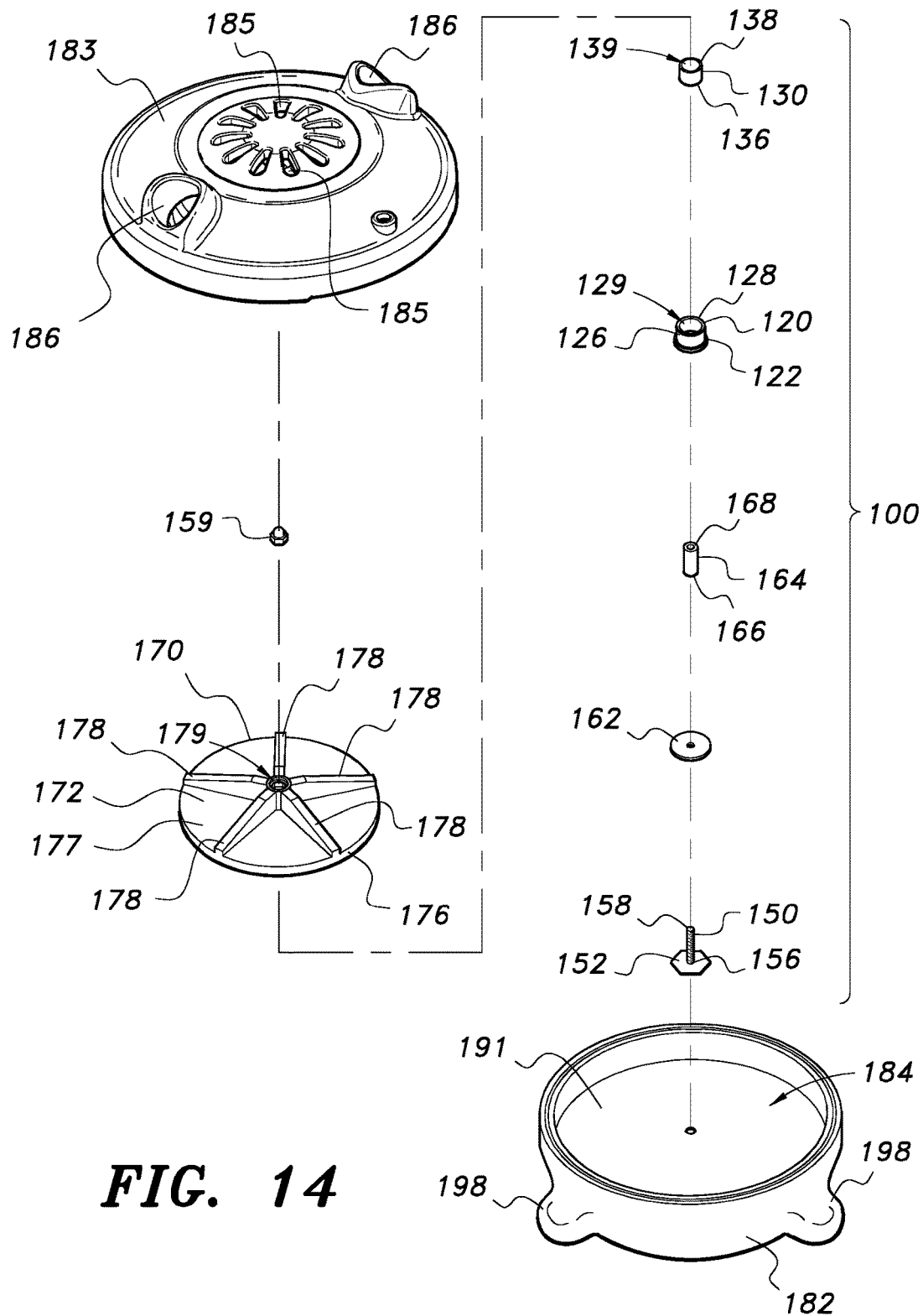
FIG. 13

U.S. Patent

May 28, 2019

Sheet 11 of 18

US 10,302,088 B2



U.S. Patent

May 28, 2019

Sheet 12 of 18

US 10,302,088 B2

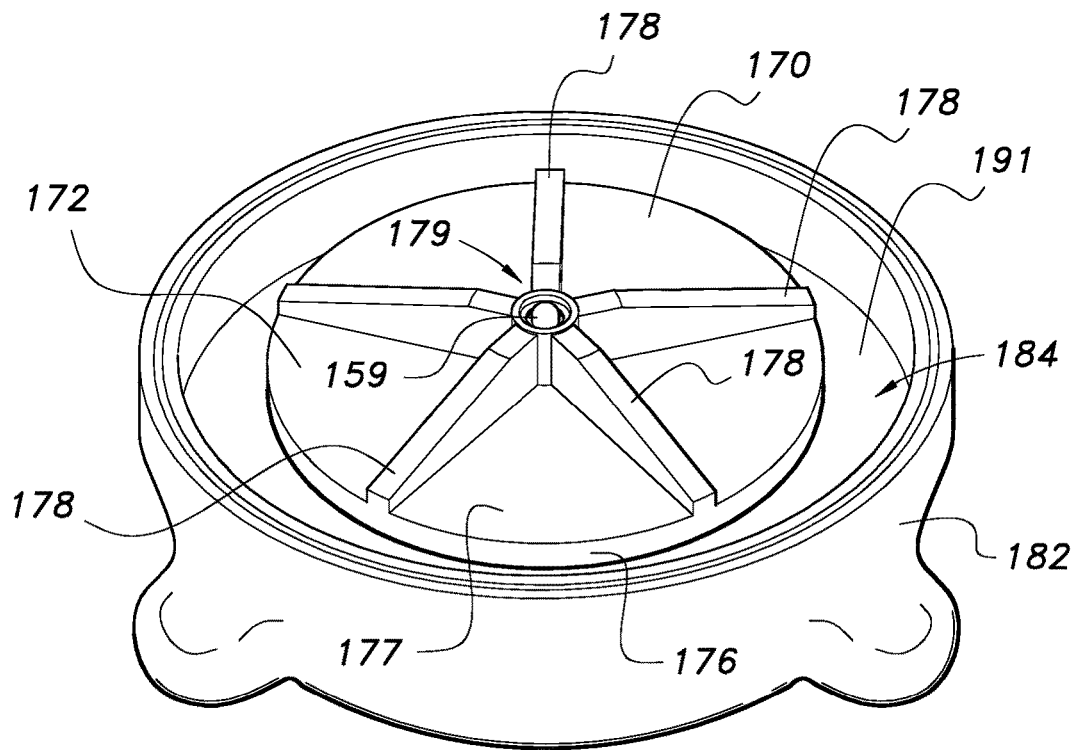


FIG. 15

U.S. Patent

May 28, 2019

Sheet 13 of 18

US 10,302,088 B2

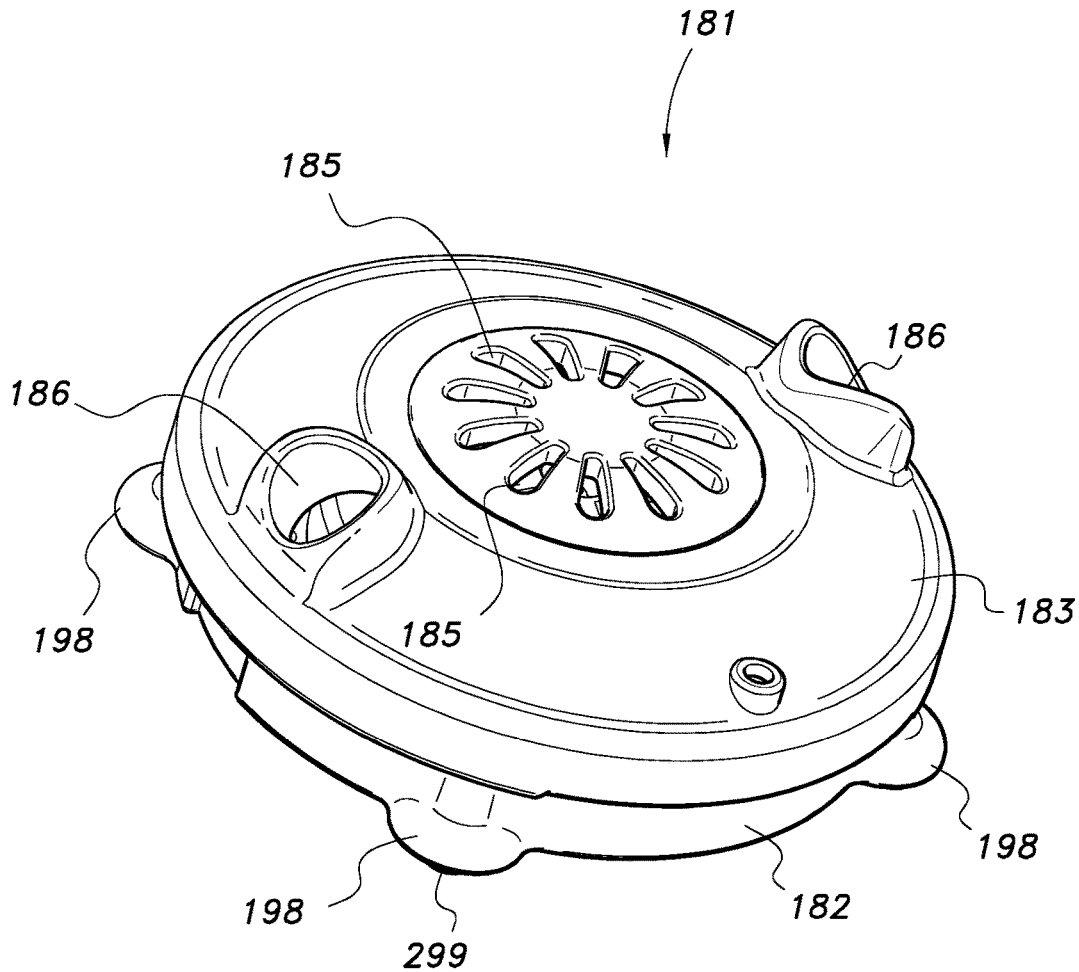


FIG. 16

U.S. Patent

May 28, 2019

Sheet 14 of 18

US 10,302,088 B2

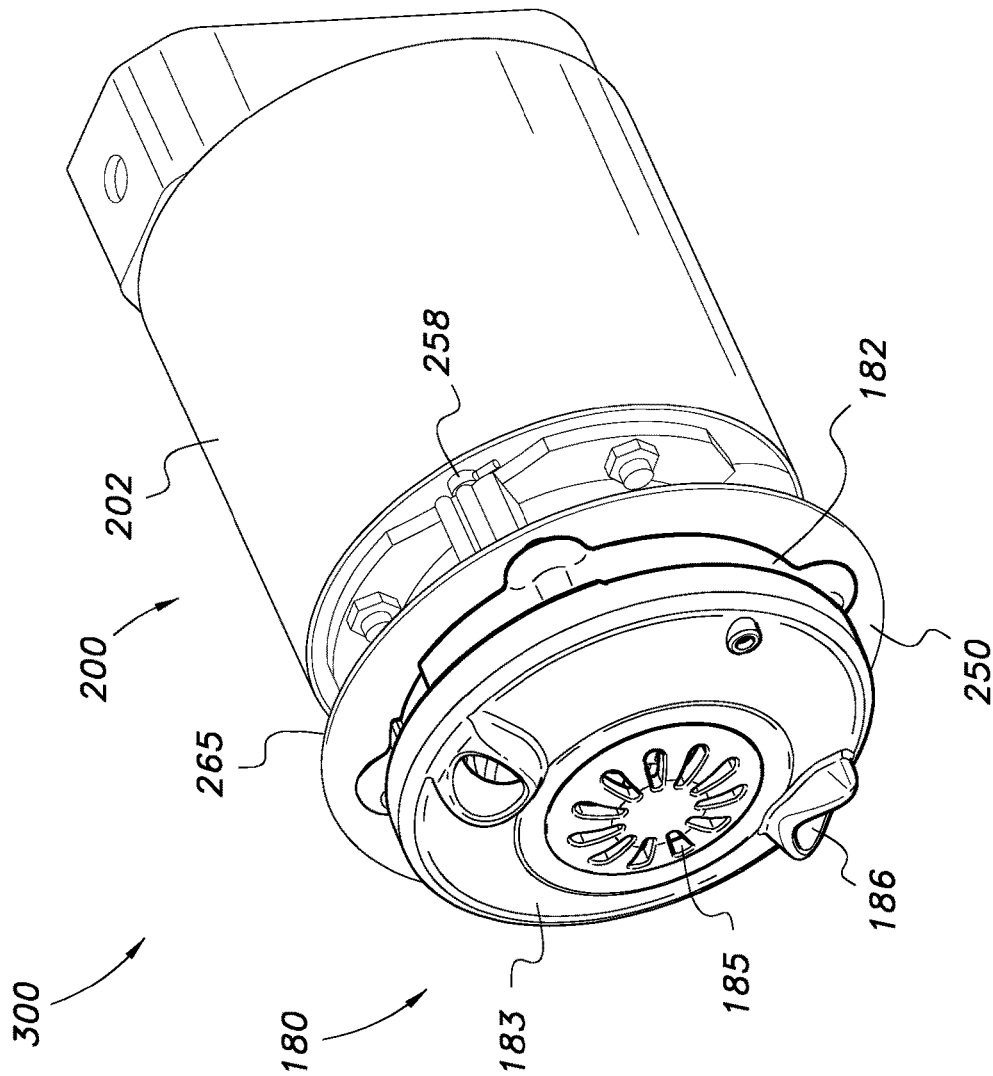


FIG. 17

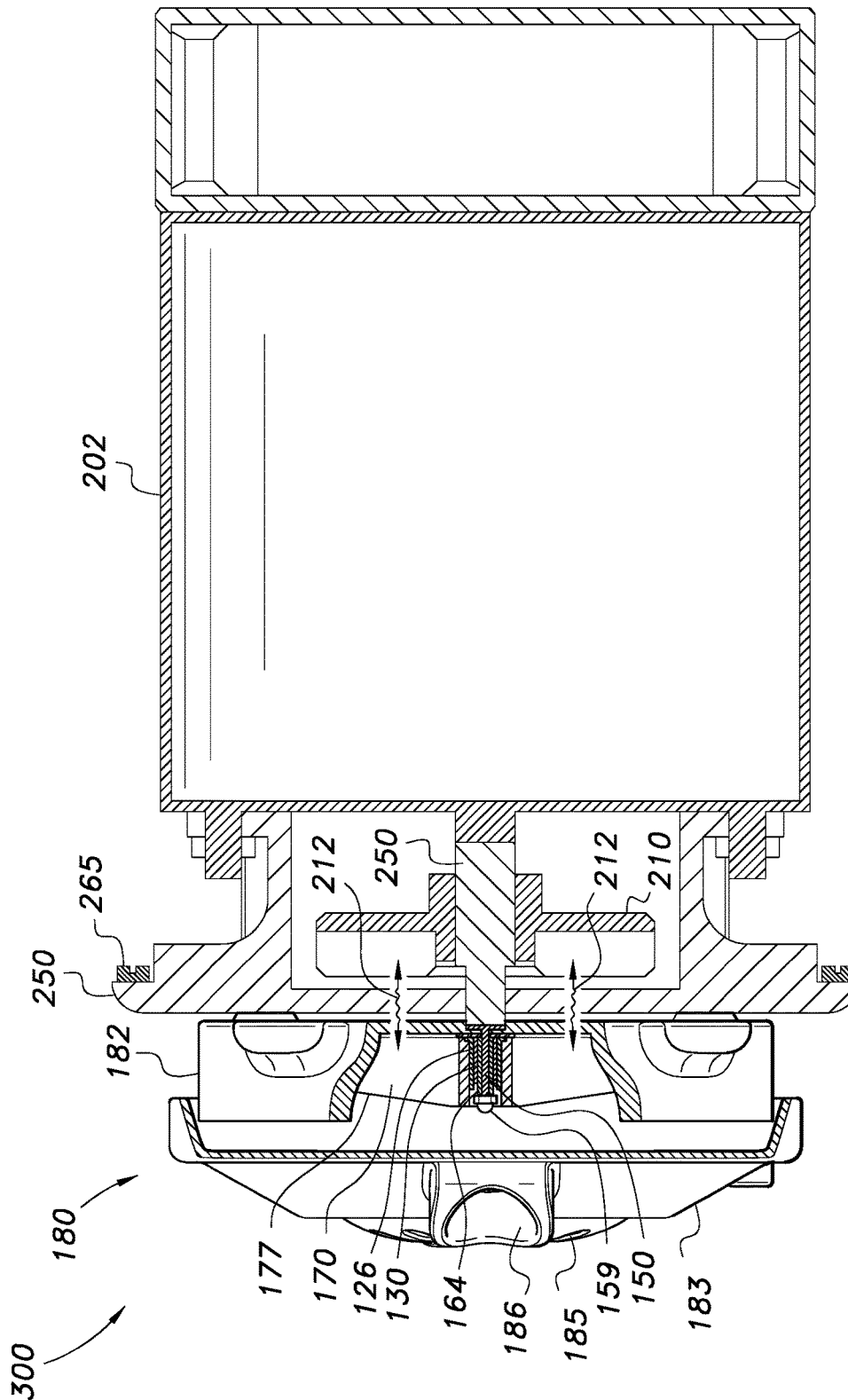


FIG. 18

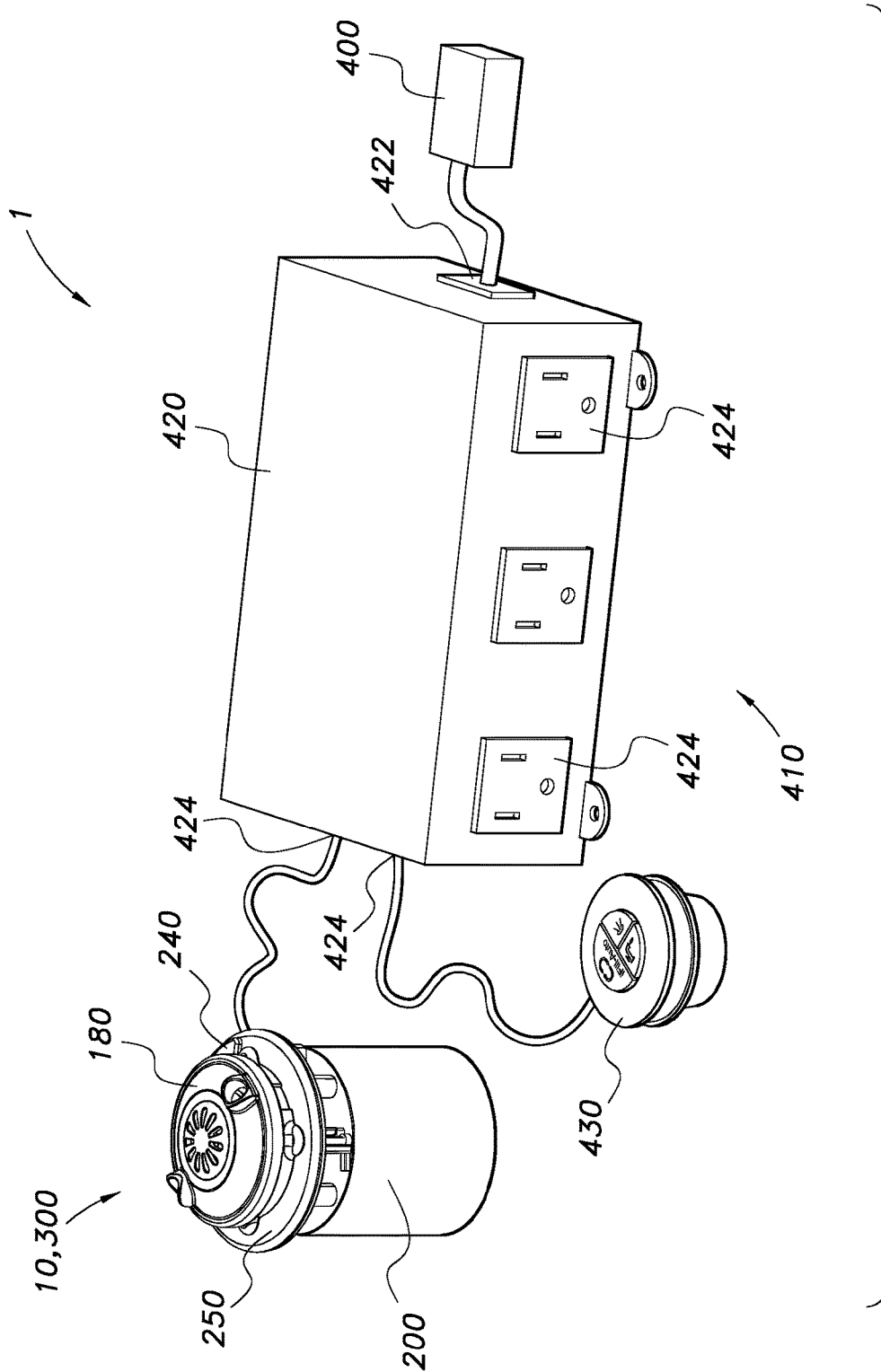


FIG. 19

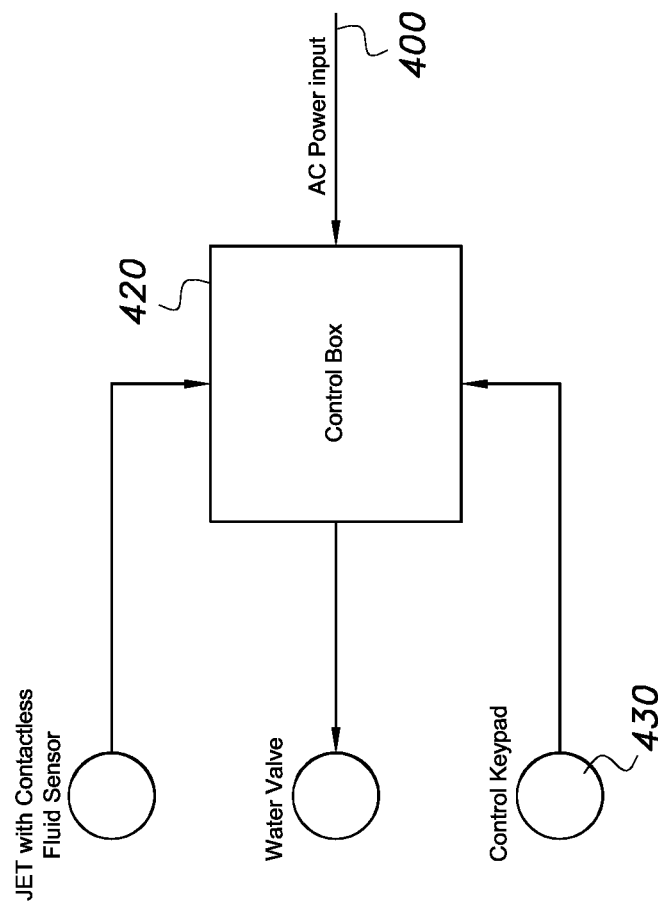


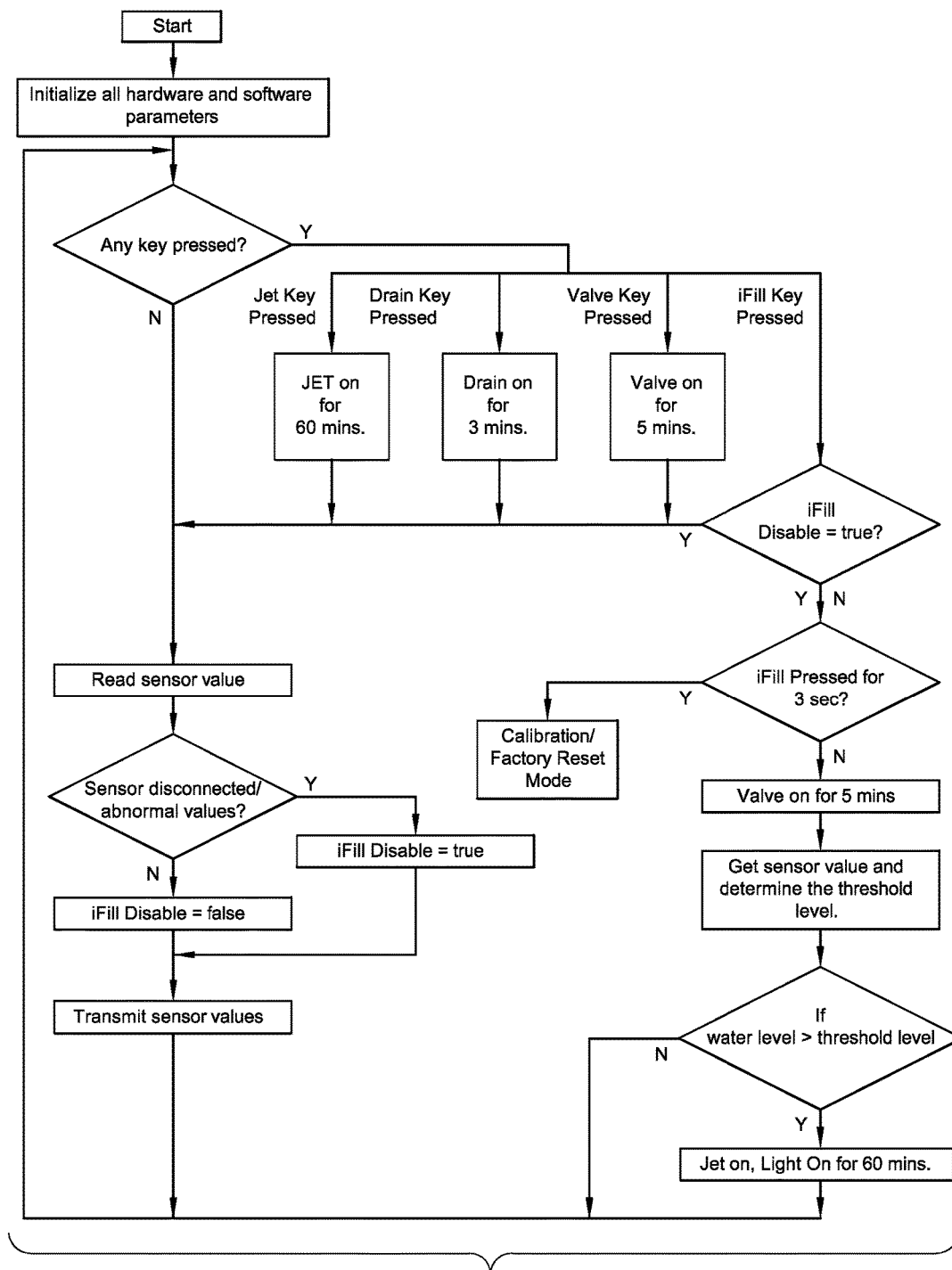
FIG. 20

U.S. Patent

May 28, 2019

Sheet 18 of 18

US 10,302,088 B2

**FIG. 21**

US 10,302,088 B2

1

**PUMP HAVING A CONTACTLESS, FLUID
SENSOR FOR DISPENSING A FLUID TO A
SETTING**

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention generally relates to spa devices, components, and systems. More specifically, the present invention is directed to a pump having a contactless, fluid sensor for dispensing a fluid to a setting and for use with a liner, to a pump apparatus comprising a pump having a contactless, fluid sensor for dispensing a fluid to a setting and for use with a liner, and to a method for dispensing a fluid to a setting by use of a pump having a contactless, fluid sensor for use with a liner.

Description of the Related Art

Spa devices, components, and systems are known in the art. Spa devices are used in commercial and recreational settings for hydrotherapy, massage, stimulation, pedicure, and bathing purposes. In the spa application setting, the issues with sanitization in the spa industry today require the use of a liner, such as a disposable liner. But with a liner, traditional water sensors in spa devices and settings, such as foot spas, will not be able to effectively detect fluids or water anymore. Thus, there exists a need for a pump having a contactless, fluid sensor adapted for use with a liner for dispensing a fluid to a setting such that fluid or water level can be effectively detected in a setting, such as, but not limited, a foot spa, a spa, a jacuzzi, a bathtub, or a swimming pool.

In addition, typical spa devices include a motor that drives a pump to circulate water from the spa device. In particular, a shaft of the motor is used to directly mount an impeller, which is then used to circulate water into and out of the spa device. Since the motor may not operate wet, a seal or a series of seals may be required to prevent water from entering the motor. The seals will wear to the point where water will enter the motor and consequently, the entering water may cause the motor to burn out. At this point, the motor assembly will need to be replaced in order to continue operation. This is expensive and may take several hours in which to perform.

Further, because typical spa devices have extensive piping systems that are built into the spa device to transport water, the spa devices are traditionally difficult to clean. This results in downtime and complicated maintenance schedules to clean such spa devices. Furthermore, if a spa device has a light source associated with it, to replace or repair such a light source can be time consuming and complicated when the light source is not easily accessible.

In the spa environment, water is commonly added with certain substances and/or products, such as salt, chemicals, sand, massage lotions, etc. Due to this reason, traditional bearings, such as ball bearings and metal bushings, will not be suitable for a long term and reliable operation. The presence of chemicals and sand, for example, will cause some or many currently available bearings to wear out quicker than normal and result in pump failures.

Additionally, for magnetic coupling-type pumps, it is almost impossible to have a perfect alignment between the motor shaft axis and the impeller rotation axis. The imperfect alignment or misalignment will result in high vibration noise.

The present invention overcomes one or more of the shortcomings of the above described spa devices, components, and systems. The Applicant is unaware of inventions

2

or patents, taken either singly or in combination, which are seen to describe the present invention as claimed.

SUMMARY OF THE INVENTION

In one exemplary aspect, the present invention is directed to a pump having a contactless, fluid sensor for dispensing a fluid to a setting and for use with a liner. The pump comprises a jet assembly, a motor assembly, and a contactless, fluid sensor assembly with a contactless, fluid sensor. The pump may further comprise a mounting housing member or coupling device, a gasket or seal, and a liner when a liner is not already present.

In another exemplary aspect, the present invention is directed to a pump apparatus comprising a pump having a contactless, fluid sensor for dispensing a fluid to a setting and for use with a liner. In addition to comprising the pump, the pump apparatus further comprises a power source for providing power to the pump, and/or a control apparatus.

The jet assembly is secured, attached or coupled to the motor assembly.

In a non-limiting embodiment, the jet assembly includes a jet assembly housing, and preferably also includes a printed circuit board (PCB), a PCB cover, a shaft assembly, and an impeller.

The jet assembly housing includes a base, a front or top cover, an impeller-receiving chamber defined by the base and front or top cover, at least one inlet aperture dimensioned and configured to allow a fluid to enter the jet assembly housing, and at least one outlet aperture dimensioned and configured to allow the fluid to exit or be dispensed from the jet assembly housing into a setting.

The shaft assembly includes at least the shaft member.

The impeller, preferably a magnetic impeller, is configured to rotate about the shaft member and to rotate within the impeller-receiving chamber such that rotation of the impeller causes fluid to enter or flow into the inlet aperture and to exit or flow out of the outlet aperture.

The motor assembly may include and/or be coupled to the power source that enables rotation of the shaft member and impeller.

The contactless, fluid sensor assembly includes a contactless, fluid sensor or sensor circuit board, and may also include a sensor cover and a sensor output data cable.

The contactless, fluid sensor may be secured, attached, fixed or mounted to any position on the other components of the pump, such as, but not limited to, the mounting housing member or coupling device, or even be positioned at a location away from the pump, that allows the sensor to be in operative communication with the other components of the pump whereby the contactless, fluid sensor is effective, especially when a liner is being used in or with the setting, in capacitive sensing of fluid or water level in the setting such that the amount or volume of fluid or water can be controlled.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid to a setting by use of a pump having a contactless, fluid sensor adapted for use with a liner.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front, right side, perspective view of a pump having a contactless, fluid sensor according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another;

US 10,302,088 B2

3

FIG. 2 is a rear, left side, perspective view of the pump of FIG. 1;

FIG. 3 is a right side, partial cross-sectional, environmental view of the pump of FIG. 1, wherein the motor assembly is secured to or proximate to a setting, such as an internal wall of a foot spa, while the jet assembly will be secured or coupled to or about the motor assembly prior to operation or use, wherein a liner will be positioned between the motor assembly and jet assembly prior to operation or use, and wherein a contactless, fluid sensor is shown positioned about the motor assembly and behind the liner prior to operation or use;

FIG. 4 is an exploded, perspective view of the pump of FIG. 1;

FIG. 5 is an exploded, perspective view of a jet assembly and a mounting housing member or coupling device according to the present invention;

FIG. 6 is a front view of a contactless, fluid sensor assembly according to the present invention;

FIG. 7 is a rear, perspective view of a front or top cover of a jet assembly housing according to the present invention, showing an inner surface of the front or top cover;

FIG. 8 is an exploded, perspective view of a shaft assembly according to the present invention;

FIG. 9 is an assembly, perspective view of the shaft assembly of FIG. 8;

FIG. 10 is an assembly, perspective view of the shaft assembly of FIG. 8 positioned relative to a jet assembly housing (without a front or top cover) of a jet assembly;

FIG. 11 is an exploded, perspective view of a bearing assembly of a bearing and shaft assembly according to the present invention;

FIG. 12 is an assembly, perspective view of the bearing assembly of FIG. 11;

FIG. 13 is an assembly, perspective view of the bearing assembly of FIG. 11 positioned within a cavity of an impeller;

FIG. 14 is an exploded, perspective view of the bearing assembly of FIG. 11, the shaft assembly of FIG. 8, and a jet assembly (with a front or top cover);

FIG. 15 is an assembly, perspective view of the bearing and shaft assembly of FIGS. 8 and 11, and the impeller and jet assembly housing of the jet assembly (without the front or top cover) of FIG. 14;

FIG. 16 is an assembly, perspective view of the bearing and shaft assembly of FIGS. 8 and 11, and the impeller and jet assembly housing of the jet assembly (with the front or top cover) of FIG. 14;

FIG. 17 is a perspective view of a magnetic, coupling-type pump according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another, and not including a contactless, fluid sensor assembly nor a liner;

FIG. 18 is a cross-sectional view of the magnetic, coupling-type pump of FIG. 17;

FIG. 19 is a perspective view of a pump apparatus according to the present invention, showing a pump and a control device or keypad being connected to a control box;

FIG. 20 is a schematic view of a control box according to the present invention, showing the control box being in operative connection or communication with a pump, a control device or keypad, a fluid valve, and a power source; and

FIG. 21 is a schematic block diagram of an embodiment of controlling fluid or water level in a setting via the use of a pump having a contactless, fluid sensor according to the present invention, showing the relationships or associations

4

of various components, such as a control keypad or device being in operative connection or communication with the pump, a control box, a fluid valve, and a power source.

It should be understood that the above-attached figures are not intended to limit the scope of the present invention in any way.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGS. 1-21, the present invention is directed to a pump 10,300, preferably a magnetic, coupling-type pump, having a contactless, fluid sensor 241 for dispensing a fluid to a setting SET, such as, but not limited, to a foot spa, a spa, a jacuzzi, a bathtub, or a swimming pool, and for use with a liner 290. The pump 10 comprises a jet assembly 180, a motor assembly 200, and a contactless, fluid sensor assembly 240 having a contactless, fluid sensor 241. The pump 10 may further comprise a mounting housing member or coupling device 250, a gasket or seal 265, and/or a liner 290 when a liner is not already provided or present. In addition, the present invention is also directed to a pump apparatus 1. Besides comprising the pump 10, the pump apparatus 1 further comprises a power source 400 for providing power to the pump 10, and/or a control apparatus 410.

The jet assembly 180 is secured, attached or coupled to the motor assembly 200, and this may be accomplished by various means. As a non-limiting example and as shown in FIGS. 1-4, the jet assembly 180 is secured, attached or coupled to or about the motor assembly 200 by the assistance of the mounting housing member 250.

As a non-limiting example and as best shown in FIGS. 4 and 7-16, the jet assembly 180 preferably includes: a jet assembly housing 181 that has a printed circuit board (PCB) 270 and a PCB cover 280; a shaft assembly 140; and an impeller 170. As an alternative, the jet assembly 180 may be substituted with the jet assembly 180'. As shown in FIGS. 8-18, the jet assembly 180' includes: a jet assembly housing 181 that does not have the PCB 270 nor the PCB cover 280; a bearing and shaft assembly 100; and an impeller 170.

As shown in FIGS. 1, 3-5, 7, 10 and 14-16, the jet assembly housing 181 includes a base 182, a front or top cover 183, an impeller-receiving chamber 184 defined by the base 182 and front or top cover 183, a plurality of inlet apertures 185 dimensioned and configured to allow a fluid to enter the jet assembly housing 181 and preferably disposed about the central area of the front or top cover 183, and a plurality of outlet apertures 186 dimensioned and configured to allow the fluid to exit or be dispensed from the jet assembly housing into the setting SET and preferably disposed about the periphery of the front or top cover 183.

As best shown in FIGS. 4, 10 and 14-16, the base 182 of the jet assembly housing 181 has an inner surface 191, an outer surface 192, a circular wall 193 at or about the periphery of the base 182, a plurality of feet extensions 198, and a plurality of engagement recesses or grooves 199. Preferably, the outer surface 192 is generally flat or has a generally flat, centrally-located section 557 that allows for a liner 290 to be positioned behind (or below) the base 182 of the jet assembly housing 181 and in front of (or above) the contact surface of the setting SET and motor assembly 200, as shown in FIG. 3. The circular wall 193 has an inner surface 194, an outer surface 195, a front or top 196, and a rear or bottom 197. Each of the plurality of feet extensions 198 extends outwardly from about the rear or bottom 197 of the circular wall 193, and has a knob 299 extending rear-

US 10,302,088 B2

5

wardly or downwardly from the corresponding feet extension **198** for engaging with the mounting housing member **250**. Each of the plurality of engagement recesses or grooves **199** is positioned at a predetermined location about the outer surface **195** of the circular wall **193** for engaging with and securing the front or top cover **183**. The base **182** may be made or manufactured of plastic, hard plastic, and/or any other suitable material known to one of ordinary skill in the art.

As best shown in FIGS. **1**, **4**, **7**, **14** and **16**, the front or top cover **183** of the jet assembly housing **181** has an inner surface **231**, an outer surface **232**, a circular wall **233** at or about the periphery of the front or top cover **183**, a plurality of engagement protrusions **238**, and a lock-receiving cavity **239**. The circular wall **233** has an inner surface **234**, an outer surface **235**, a front or top **236**, and a rear or bottom **237**. Each of the plurality of engagement protrusions **238** is positioned at a predetermined location about the inner surface **234** of the circular wall **233** for engaging with a corresponding engagement recess or groove **199** of the base **182** such that the base **182** and front or top cover **183** may be detachably secured to one another prior to and during operation or use and also may be detachably unsecured from one another after operation or use for allowing access to the components, maintenance, etc. The lock-receiving cavity **239** is configured and positioned at a predetermined location about the inner surface **231** of the front or top cover **183** such that the lock-receiving cavity **239** receives the tip of the shaft member **150** (or locking mechanism **159**) when the base **182** and front or top cover **183** are detachably secured to one another prior to and during operation or use. The front or top cover **183** may be made or manufactured of plastic, hard plastic, and/or any other suitable material known to one of ordinary skill in the art.

Preferably, the plurality of inlet apertures **185** form an outer diameter that is smaller than the outer diameter of the impeller **170**.

Preferably, each of the outlet apertures **186** has a nozzle. Preferably, each of the nozzles and an axis of the pump **10,300** form an angle less than 90 degree.

As shown in FIG. **4**, the PCB **270** of the jet assembly housing **181** has a "disc-like" configuration or shape, and includes a front or top side **271**, a rear or bottom side **272**, a hole **273**, a plurality of inductive coils **274**, and a light source **275**, such as, but not limited to, a plurality of LED light members **275**. The hole **273** allows the shaft member **150** to pass through, and is preferably centrally located. The plurality of inductive coils **274** are positioned at predetermined locations on the front or top side **271** proximate the hole **273**. The plurality of LED light members **275** are positioned at predetermined locations on the front or top side **271** about the periphery of the PCB **270**, and provide lighting or illumination to the jet assembly housing **181**. The PCB **270** is secured or attached to the base **182** prior to operation or use such that the rear or bottom side **272** of the PCB **270** is adjacent or in close proximity to the inner surface **191** of the base **182**. The PCB **270** may be secured or attached to the base **182** by any method known to one of ordinary skill in the art.

Preferably, the light source **275** is configured to emit a light that illuminates the first fluid, when the magnetic array **177,210** is driven. The impeller **170** causes the first fluid to flow into the plurality of inlet apertures **185** and out the plurality of outlet apertures **186**. Illuminating the first fluid via the light source **275** includes providing energy to the light source **275** via magnetic waves captured by the inductive coils **274**, which are positioned between the impeller

6

170 and base **182** of the jet assembly housing **181**. As a non-limiting example, the parameter of the illumination includes at least one of intensity, color, illumination sequencing, and any combination thereof.

As shown in FIG. **4**, the PCB cover **280** of the jet assembly housing **181** has a "disc-like" configuration or shape, and includes a front or top side **281**, a rear or bottom side **282**, a hole **283**, and a plurality of LED light member covers **285**. The hole **283** allows the shaft member **150** to pass through, and is preferably centrally located. The plurality of LED light member covers **285** are positioned at predetermined locations on the front or top side **281** about the periphery of the PCB cover **280**, and are adapted for being secured or attached with corresponding LED light members **275** of the PCB **270**. The PCB cover **280** is positioned upon the PCB **270** such that the rear or bottom side **282** of the PCB cover **280** is adjacent or in close proximity to the front or top side **271** of the PCB **270**.

As shown in FIGS. **4**, **8**, **9**, **10**, **14**, **15** and **17**, the shaft assembly **140** includes the shaft member **150**, the shaft protection member **160**, and, preferably, the locking mechanism **159**.

The shaft member **150** includes a base **152** and a cylindrical body **154** extending upwardly from the base **152**. The cylindrical body **154** has a first end **156** and a second end **158**. As best shown in FIG. **4**, the shaft member **150** and shaft protection member **160** are secured, attached, fixed or mounted within the housing **181**, preferably in a central location upon the inner surface **191** of the base **182** of the housing **181**, of the jet assembly **180,180'** via the base **152** of the shaft member **150** being secured, attached, fixed or mounted to the base **182** of the housing **181**. The cylindrical body **154** has a first end **156** and a second end **158**. The shaft member **150** is preferably made or manufactured of steel or a metal material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft member **150**. Also, the shaft member **150** is preferably made or manufactured as a single piece. It is obvious to one of ordinary skill in the art that the shaft member **150** may be made or manufactured as multiple pieces.

The shaft protection member **160** includes a base **162**, preferably a ring-like base, and a cylindrical body **164** extending upwardly from the ring-like base **162**. The cylindrical body **164** has a first end **166**, a second end **168**, and a cavity **169** extending from the first end **166** to the second end **168**. As shown in FIG. **8**, the cavity **169** is dimensioned and configured for receiving the cylindrical body **154** of the shaft member **150**. The shaft protection member **160** is preferably made or manufactured of a hard material, such as ceramic or a ceramic-type material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft protection member **160**. Also, the shaft protection member **160** is preferably polished or super smooth on its outer surface. Further, the shaft protection member **160** is preferably made or manufactured as two pieces. It is obvious to one of ordinary skill in the art that the shaft protection member **160** may be made or manufactured as a single piece.

The locking mechanism **159** secures the impeller **170**, preferably the magnetic impeller **170**, within the housing **181** of the jet assembly **180,180'**. The locking mechanism **159** may be a locking nut that, when in use, is secured onto the second end **158** of the cylindrical body **154** of the shaft member **150**.

As shown in FIGS. **4**, **14** and **15**, the impeller **170**, preferably a magnetic impeller **170** and more preferably a

US 10,302,088 B2

7

planar magnetic impeller 170, has an outer diameter and a “disc-like” configuration or shape, and includes a front side 172, a rear side 174, a sidewall 176, a circular array of arm members 178 positioned on the front side 172, and the centrally-disposed cavity 179 dimensioned and configured for receiving the outer bearing member 120, inner bearing member 130, shaft member 150, and shaft protection member 160. The centrally-disposed cavity 179 preferably extends from the front side 172 through to the rear side 174. The magnetic impeller 170 is configured to rotate about the shaft member 150 and shaft protection member 160 and to rotate within the impeller-receiving chamber 184. Preferably, the magnetic impeller 170 is formed in whole or in part of a magnetic pole array 177 that, as discussed below, interacts with magnetic pole array 210 of the motor assembly 200 to rotate the magnetic impeller 170 about the shaft member 150 and shaft protection member 160 such that rotation of the magnetic impeller 170 causes the fluid to flow into the inlet aperture 185 and out the outlet aperture 186. As a non-limiting example, the magnetic impeller 170 may contain a magnetic plate within an exterior made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that the magnetic impeller 170 may be other types of magnetic impellers that is known in the art.

As best shown in FIG. 18, the motor assembly 200 includes a motor 202, a magnetic pole array 210 such that the motor 202 is configured to drive the magnetic pole array 210, a mounting housing member 250, a gasket 265, a shaft member 150 that is coupled to the magnetic pole array 210, and a plurality of screws with wing nuts 258 to support the pump mounting. The mounting housing member 250 and gasket 265 preferably enclose all or a substantial portion of the magnetic pole array 210, and help to keep fluids and/or substances away from the motor 202 and magnetic pole array 210 so that contamination and/or damage is reduced or prevented. The magnetic pole array 210 is formed of magnetic material and/or is magnetized in order to generate a magnetic field 212.

In that regard, the motor assembly 200 may include and/or be coupled to a power source 400 that enables rotation of the shaft member 150. Upon operation of the motor assembly 200, the shaft member 150 is rotated such that the magnetic field 212 generated by the magnetic pole array 210 moves or fluctuates in accordance with the rotation of the magnetic pole array 210.

Furthermore, the motor assembly 200 may further include an air channel (not shown), or air channel member (not shown). In that regard, the air channel includes an inlet (not shown) and outlet (not shown). The air channel, in part, enables the jet assembly 180, 180' to produce a jet stream of fluid that includes an air mixture.

As best shown in FIGS. 1-5, the mounting housing member 250 helps to secure, attach or couple the jet assembly 180 and motor assembly 200 together, or at least in proximity of one another, such that the jet assembly 180 and motor assembly 200 are in operative communication with one another. The mounting housing member 250 includes a front (or top) side 251, a rear (or bottom) side 252, the sensor-receiving cavity 253 located about the periphery of the front (or top) side 251, a plurality of engagement holes or ports 255, a plurality of mounting legs 256 extending rearwardly (or downwardly) from the rear (or bottom) side 252, and at least one wing nut 258. Preferably, the front (or top) side 251 is generally flat or has a generally flat, centrally-located section 257 that allows for a liner 290 to be positioned behind (or below) the base 182 of the jet assembly

8

housing 181 and in front of (or above) the front or top side 251 of the mounting housing member 250 and motor assembly 200, as shown in FIGS. 3-5. The sensor-receiving cavity 253 is dimensioned and configured for receiving the contactless, fluid sensor or sensor circuit board 241, and preferably has a hole or opening 254. Each of the plurality of engagement holes or ports 255 is dimensioned and configured for receiving the corresponding knob 299 that extends rearwardly or downwardly from the corresponding feet extension 198 of the base 182 of the jet assembly housing 181. The securement, attachment or engagement of the knobs 299 of the plurality of feet extensions 198 to or inside the plurality of engagement holes or ports 255 of the mounting housing member 250 prevents the rotation of the base 182 and front or top cover 183 of the jet assembly housing 181 when the pump 10, 300 is in operation, and thus form the jet assembly rotation locking mechanism. Each of the plurality of mounting legs 256 has a first end 259, a second end 260, and a hollow channel 261 extending from the first end 259 toward the second end 260. Each hollow channel 261 is dimensioned and configured for receiving a corresponding screw (not shown) of a plurality of screws when the motor assembly 200 is to be secured to the mounting housing member 250. Preferably, the wing nut 258 rotates to extend out to provide a lock for the securement or installation of the mounting housing member 250 and motor assembly 200 to one another. The plurality of screws and wing nut 258 secure or attach the mounting housing member 250 and motor assembly 200 to one another when the user screws or tightens the screws into the hollow channel 261 of the mounting legs 256 and rotates the wing nut 258. The tightening of the screws into the hollow channel 261 of the mounting legs 256 and rotation of the wing nut 258 causes pressure to be applied to the gasket or seal 265 such that a strong seal will form between the gasket or seal 265 and contact surface of the setting SET. The mounting housing member 250 may be made or manufactured of plastic, hard plastic, and/or any other suitable material known to one of ordinary skill in the art. Preferably, the mounting housing member 250 is made or manufactured of a plastic material to allow for magnetic field penetration from the motor assembly 200, without any, or with minimal, magnetic field loss. This allows for a magnet or magnets of smaller size, in comparison to a magnet or magnets needed when the mounting housing member 250 is made or manufactured of a non-plastic material, to be used, and, thus, reducing cost for magnets.

As shown in FIG. 2, the gasket or seal 265, preferably a ring-shaped or ring-type gasket, acts or serves as a fluid or water seal to prevent fluid or water from getting past the contact surface of the setting SET and making contact with the motor assembly 200 during use of the pump 10. As shown in FIG. 3, the gasket 265 is secured to and positioned below (or behind) and adjacent to the rear or bottom side 252 of the mounting housing member 250 and above (or in front of) and adjacent to the contact surface of the setting SET. Preferably, the gasket 265 is made or manufactured of a rubber material.

As a non-limiting example and as best shown in FIGS. 2, 4 and 6, the contactless, fluid sensor assembly 240 includes a contactless, fluid sensor or sensor circuit board 241, a sensor cover 244, and a sensor output data cable or cable connector 245.

The contactless, fluid sensor 241 is secured, attached, fixed or mounted to the sensor-receiving cavity 253 of the mounting housing member 250. Preferably, the contactless, fluid sensor 241 is a contactless, capacitive fluid sensor 241.

US 10,302,088 B2

9

It is obvious to one of ordinary skill in the art that the contactless, fluid sensor **241** can be secured, attached, fixed or mounted to any position on the other components of the pump **10**, such as, but not limited to, the mounting housing member **250**, or even be positioned at a location away from the pump **10**, that allows the contactless, fluid sensor **241** to be in operative communication with the other components of the pump **10** whereby the contactless, fluid sensor **241** is effective, especially when a liner **290** is being used in or with the setting SET, in capacitive sensing of fluid or water level within the setting SET such that the amount or volume of fluid or water can be controlled. The contactless, fluid sensor **241** preferably includes a plurality of connections **242** for data wiring and an electronic circuit **243** for capacitive sensing of fluid or water level within the setting SET such that the amount or volume of fluid or water within the setting SET can be controlled when a liner **290** is being used within the setting SET. When in use or operation, a liner **290** is positioned behind the base **182** of the jet assembly housing **181** and in front of the contactless, fluid sensor **241** such that the liner **290** prevents the fluid within the setting SET from making contact with the contactless, fluid sensor **241**.

The sensor cover **244** is secured, attached, fixed or mounted to the contactless, fluid sensor **241**, and provides protection for the contactless, fluid sensor **241** against fluid or water, chemicals, substances, etc. that are present in the setting SET. Preferably, the sensor cover **244** is dimensioned and configured to cover all or substantially all of the contactless, fluid sensor **241**. Preferably, the sensor cover **244** is made or manufactured of a non-metal material.

The sensor output data cable or cable connector **245** operatively connects with, or is in operative communication with, the plurality of connections **242** for data wiring of the contactless, fluid sensor **241** through the hole or opening **254** of the sensor-receiving cavity **253**.

As a non-limiting example and as best shown in FIG. 3, the liner **290**, preferably a disposable liner **290**, may be included with the pump **10** or may be provided by an operator or user of the setting SET. The liner **290** is positioned between the base **182** of the jet assembly housing **181** and the mounting housing member **250**, with the contactless, fluid sensor **241** being secured, attached, fixed or mounted to the mounting housing member **250**, such that the fluid or water, chemicals, substances, etc. that are present in the setting SET do not make contact with the contactless, fluid sensor **241**. The liner **290** helps to provide proper or adequate hygiene for customers or users. Preferably, the disposable liner **290** is made or manufactured of a plastic material or any other material known to one of ordinary skill in the art. If the liner **290** is not a disposable version, then it is preferred that the liner **290** is made or manufactured of a material that is easily washed or cleaned, or any other material known to one of ordinary skill in the art.

As shown in FIGS. 19 and 20, the power source **400** provides power to the pump **10,300**, and preferably provides power to the motor **202** of the motor assembly **200** of the pump **10,300** to drive the impeller **170**. As a non-limiting example, the power source **400** may be AC power input, at least one battery, or any power source known to one of ordinary skill in the art. As shown in FIGS. 19 and 20, the motor **202** may be connected to the power source **400** via the control box **420** of the control apparatus **410**.

As shown in FIGS. 19 and 20, the control apparatus **410** preferably includes the control box **420** and a control keypad or device **430**. The control box **420** preferably includes at least one inlet **422** for being in operative communication with the power source **400**, and multiple outlets **424** for

10

being in operative communication with the pump **10,300** and control keypad or device **430**. The control keypad or device **430** preferably acts as a remote control device to be able to turn the pump **10,300** on and off, to adjust how much fluid the fluid or water valve should allow to be added into and/or to be removed or drained from the setting SET, etc. In addition, it is preferred that the control keypad or device **430** is operable to control at least one of the intensity, color, illumination sequencing, and any combination thereof for the array of LED light members **275**.

FIG. 21 shows a schematic block diagram of an embodiment of controlling fluid or water level in a setting via the use of a pump **10,300** having a contactless, fluid sensor **241** according to the present invention, showing the relationships or associations of various components, such as the control keypad or device **430** being in operative connection or communication with the pump **10,300**, the control box **420**, a fluid valve, and the power source **400**.

As best shown in FIGS. 8-14, the bearing and shaft assembly **100** is comprised of a bearing assembly **110** comprising an outer bearing member **120** and an inner bearing member **130**, and a shaft assembly **140** comprising a shaft member **150**, a shaft protection member **160**, and a locking mechanism **159**.

As shown in FIGS. 11-14, the outer bearing member **120** and inner bearing member **130** perform as a bearing. The inner bearing member **130** absorbs vibration and noise when in use with other components of the jet assembly **180,180'**.

The outer bearing member **120** includes a base **122**, preferably a ring-like base, and a cylindrical body **124** extending upwardly from the ring-like base **122**. The ring-like base **122** has a predetermined thickness. The cylindrical body **124** has a first end **126**, a second end **128**, and a cavity **129** extending from the first end **126** to the second end **128**.

As shown in FIGS. 11-14, the cavity **129** is dimensioned and configured for receiving the inner bearing member **130**. Preferably, when in use, the outer bearing member **120** and inner bearing member **130** are closely or tightly positioned relative to one another such that they form an effective seal. As shown in FIGS. 13 and 14, the outer bearing member **120** is dimensioned and configured for fitting, preferably closely or tightly fitting, within a centrally-disposed cavity **179** of the impeller **170**, preferably a magnetic impeller and more preferably a planar magnetic impeller, of the jet assembly **180,180'**. Preferably and as best shown in FIG. 13, the ring-like base **122** of the outer bearing member **120** and first end **136** of the cylindrical body **134** of the inner bearing member **130** are substantially flush with the rear side **174** of the magnetic impeller **170** when the outer bearing member **120** and inner bearing member **130** are positioned within the centrally-disposed cavity **179** of the magnetic impeller **170**. Preferably, the centrally-disposed cavity **179** of the magnetic impeller **170** is dimensioned and configured for effectively receiving the bearing assembly **110** prior to use, and also for effectively retaining the bearing assembly **110** when in use. The outer bearing member **120** is preferably made or manufactured of a plastic material or engineered plastics. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the outer bearing member **120**.

The inner bearing member **130** includes cylindrical body **134** having first end **136**, a second end **138**, and a cavity **139** extending from the first end **136** to the second end **138**. As shown in FIGS. 11-14, the cavity **139** is dimensioned and configured for receiving the shaft member **150** and shaft protection member **160** of the shaft assembly **140**. The inner bearing member **130** is preferably made or manufactured of

US 10,302,088 B2

11

rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the inner bearing member 130.

As shown in FIGS. 8-10 and 14, the shaft member 150 includes a base 152 and a cylindrical body 154 extending upwardly from the base 152. The cylindrical body 154 has a first end 156 and a second end 158. As best shown in FIG. 10, the shaft member 150 and shaft protection member 160 are secured, attached, fixed or mounted within the housing 181, preferably in a central location upon the inner surface 191 of the base 182 of the housing 181, of the jet assembly 180,180' via the base 152 of the shaft member 150 being secured, attached, fixed or mounted to the base 182 of the housing 181. The cylindrical body 154 has a first end 156 and a second end 158. The shaft member 150 is preferably made or manufactured of steel or a metal material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft member 150. Also, the shaft member 150 is preferably made or manufactured as a single piece. It is obvious to one of ordinary skill in the art that the shaft member 150 may be made or manufactured as multiple pieces.

The shaft protection member 160 includes a base 162, preferably a ring-like base, and a cylindrical body 164 extending upwardly from the ring-like base 162. The cylindrical body 164 has a first end 166, a second end 168, and a cavity 169 extending from the first end 166 to the second end 168. As shown in FIG. 8, the cavity 169 is dimensioned and configured for receiving the cylindrical body 154 of the shaft member 150. The shaft protection member 160 is preferably made or manufactured of a hard material, such as ceramic or a ceramic-type material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft protection member 160. Also, the shaft protection member 160 is preferably polished or super smooth on its outer surface. Further, the shaft protection member 160 is preferably made or manufactured as two pieces. It is obvious to one of ordinary skill in the art that the shaft protection member 160 may be made or manufactured as a single piece.

The locking mechanism 159 secures the impeller 170, preferably the magnetic impeller 170, within the housing 181 of the jet assembly 180,180'. The locking mechanism 159 may be a locking nut that, when in use, is secured onto the second end 158 of the cylindrical body 154 of the shaft member 150.

In addition, when the magnetic coupling-type pump 300 is assembled as shown in FIGS. 17 and 18, the jet assembly 180' is positioned adjacent or in close proximity to the mounting housing member 250 and motor assembly 200. The jet assembly 180' is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180' is positioned adjacent or in close proximity to the mounting housing member 250. The jet assembly 180' and mounting housing member 250 can be secured or coupled to one another by any method and/or device known to one of ordinary skill in the art.

In operation or use and as shown in FIGS. 5 and 10-14, the base 152 of the shaft member 150 and base 162 of the shaft protection member 160 may be secured, attached, fixed or mounted preferably in a central location upon the inner surface 191 of the base 182 of the housing 181 of the jet assembly 180,180' of the magnetic coupling-type pump 10,300. The bearing assembly 110 may then be positioned in the cavity 179 of the magnetic impeller 170, which can then be positioned within the impeller-receiving chamber 184 of

12

the housing 181 of the jet assembly 180,180'. The locking mechanism or nut 159 can then be secured to the second end 158 of the cylindrical body 154 of the shaft member 150 to secure the magnetic impeller 170 within the housing 181 of the jet assembly 180,180'.

Preferably when in operation or use and as shown in FIGS. 17 and 18, the jet assembly 180,180' is positioned adjacent or in close proximity to the motor assembly 200 when the magnetic coupling-type pump 10,300 is fully assembled. In that regard, the jet assembly 180,180' is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180,180' is positioned adjacent or in close proximity to the motor assembly 200. Specifically, the magnetic pole array 210 of the motor assembly 200 and the magnetic pole array 177 of the jet assembly 180,180' magnetically couple together the motor assembly 200 and the jet assembly 180,180'.

Moreover, during operation of the motor assembly 200, the shaft member 150 is rotated such that the magnetic field 212 generated by the magnetic pole array 210 of the motor assembly 200 moves or fluctuates in accordance with the rotation of the magnetic pole array 210 of the motor assembly 200. This moving or fluctuating magnetic field 212 moves and/or causes rotation of magnetic pole array 177 of the magnetic impeller 170. Additionally, as discussed in greater detail below, rotation of the magnetic impeller 170 results in fluid being drawn towards the magnetic impeller 170 through inlet apertures 185 and such fluid to be propelled out of the jet assembly 180,180' through the outlet aperture 186.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid to a setting using a pump 10,300 having a contactless, fluid sensor 241 and the pump being for use with a liner 290, the method comprising the steps of:

securing a pump 10,300 to a setting SET, wherein the pump 10,300 comprises a motor assembly 200 comprising a motor 202, a jet assembly 180,180' secured to or about the motor assembly 200, and a contactless, fluid sensor assembly 240 comprising a contactless, fluid sensor 241, wherein the jet assembly 180,180' is in operative communication with the motor 202, wherein the jet assembly 180,180' comprises a jet assembly housing 181, a shaft member assembly, and an impeller 170 having an outer diameter, wherein the jet assembly housing 181 comprises a base 182, a top cover 183, an impeller-receiving chamber 184 defined by the base 182 and the top cover 183, at least one inlet aperture 185, and at least one outlet aperture 186, wherein the base 182 of the jet assembly housing 181 comprises an inner surface 191 and an outer surface 192, wherein the top cover 183 of the jet assembly housing 181 comprises an inner surface 231 and an outer surface 232, wherein the shaft member assembly comprises a shaft member 150 secured to the base 182 of the jet assembly housing 181, wherein the at least one inlet aperture 185 is disposed about the housing 181 and is dimensioned and configured to allow a fluid to enter the jet assembly housing 181 when in operation, wherein the at least one outlet aperture 186 is disposed about the housing 181 and is dimensioned and configured to allow the fluid to exit from the jet assembly housing 181 and enter a setting SET when in operation, wherein the impeller-receiving chamber 184 is dimensioned and configured to receive the impeller 170 and to allow the impeller 170 to rotate about the shaft member 150 within the impeller-receiving chamber 184, and wherein the impeller 170 is caused by the motor 202 to rotate within the impeller-receiving chamber 184 when in operation, wherein the

US 10,302,088 B2

13

rotation of the impeller **170** causes a first fluid to enter the jet assembly housing **181** via the at least one inlet aperture **185** and to exit the jet assembly housing **181** via the at least one outlet aperture **186**;

securing a liner **290** to the pump **10,300** (preferably), or the setting SET, wherein the contactless, fluid sensor **241** is secured at a predetermined location on the pump **10,300** that is rearward of both the jet assembly **180,180'** and the liner **290** being used within the setting SET such that the contactless, fluid sensor **241** does not make contact with a fluid when in operation, wherein the contactless, fluid sensor **241** is able to detect a fluid level in the setting SET such that the amount or volume of fluid within the setting SET can be controlled; causing rotation of the impeller **170** about the shaft member assembly and positioned within the impeller-receiving chamber **184** defined by the housing **181** of the jet assembly **180,180'**;

allowing the fluid to enter the housing **181** of the jet assembly **180,180'** through the at least one input aperture **185** disposed about the housing **181** of the jet assembly **180,180'**;

disturbing the entered fluid with the rotating impeller **170**; and

dispensing the entered fluid through the at least one output aperture **186** disposed about the housing **181**.

In addition, the method above may further include: wherein the shaft member assembly is a bearing and shaft assembly **100** that is comprised of a bearing assembly **110** comprising an outer bearing member **120** and an inner bearing member **130**, and a shaft assembly **140** comprising a shaft member **150**, a shaft protection member **160**, and a locking mechanism **159**.

Furthermore, the method above may further include:

wherein the outer bearing member **120** further comprises a base **122** comprising a cavity, wherein the cylindrical body **124** of the outer bearing member **120** extends upwardly from the base **122**, wherein the cavity of the base **122** is dimensioned and configured for receiving the inner bearing member **130**,

wherein the shaft member **150** further comprises a base **152**, wherein the cylindrical body **154** of the shaft member **150** extends upwardly from the base **152** of the shaft member **150**, and

wherein the shaft protection member **160** further comprises a base **162** comprising a cavity, wherein the cylindrical body **164** of the shaft protection member **160** extends upwardly from the base **162** of the shaft protection member **160**, and wherein the cavity of said base **162** is dimensioned and configured for receiving the shaft member **150**.

Additionally, the method above may further include:

wherein the jet assembly **180,180'** is adapted for being secured to a pump **10,300**, such as a magnetic coupling pump **10,300** and the like, wherein the impeller **170** is a magnetic impeller **170** comprising a magnetic pole array **177**, wherein a motor assembly **200** of the magnetic coupling pump **300** comprises a motor **202**, a magnetic pole array **210**, and a shaft member **208** adapted for being rotated such that a magnetic field **212** generated by the magnetic pole array **210** of the motor assembly **200** moves or fluctuates in accordance with the rotation of the magnetic pole array **210** of the motor assembly **200**, wherein the motor **202** drives the magnetic pole array **210** of the motor assembly **200**, wherein the magnetic field **212** moves and/or causes rotation of the magnetic pole array **177** of the magnetic impeller **170**, and wherein rotation of the magnetic impeller **170** results in the fluid being drawn towards the magnetic impeller **170** through the at least one inlet aperture **185** and

14

the fluid to be propelled out of the jet assembly **180,180'** through the at least one outlet aperture **186**.

Further, the method above may further include:

wherein the outer bearing member **120** is manufactured of a plastic material or engineered plastics, wherein the inner bearing member **130** is manufactured of rubber or a rubber-like material, wherein the shaft member **150** is manufactured of steel or a metal material, and wherein the shaft protection member **160** is manufactured of a hard material.

Furthermore, the method above may further include any of the parts, steps and/or details that have been described in the above paragraphs with regard to the improved bearing and shaft assembly **100**, jet assemblies **180,180'**, and pumps **10,300**, such as magnetic coupling pumps **10,300** and the like.

It is to be understood that the present invention is not limited to the embodiments described above or as shown in the attached figures, but encompasses any and all embodiments within the spirit of the invention.

What is claimed is:

1. A magnetic coupling-type, fluid pump for dispensing a fluid to a setting in manicure and pedicure industries, said fluid pump comprising:

a motor assembly comprising a motor;

a jet assembly comprising a jet assembly housing and a magnetic impeller having an outer diameter,

wherein said jet assembly housing comprises a base, a top cover, an impeller-receiving chamber defined by said base and said top cover, at least one inlet aperture, and at least one outlet aperture, and

wherein said impeller-receiving chamber is dimensioned and configured to receive said impeller and to allow said impeller to rotate within said impeller-receiving chamber;

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member; and

a contactless, fluid sensor assembly comprising a contactless, fluid sensor, wherein said contactless, fluid sensor is secured to said mounting housing member such that said contactless, fluid sensor does not make contact with the fluid when in operation, and wherein said contactless, fluid sensor is able to detect a fluid level in the setting such that the amount or volume of fluid within the setting can be controlled.

2. The fluid pump according to claim **1**, wherein said contactless, fluid sensor is positioned between a liner and said mounting housing member.

3. The fluid pump according to claim **1**, wherein said contactless, fluid sensor is a contactless, capacitive fluid sensor that allows for capacitive sensing of fluid or water level within the setting.

4. The fluid pump according to claim **1**, wherein said jet assembly further comprises a bearing assembly and a shaft assembly.

5. The fluid pump according to claim **1**, wherein said contactless, fluid sensor is a contactless, capacitive fluid sensor that allows for capacitive sensing of fluid or water level within the setting, and wherein said jet assembly housing further comprises a printed circuit board (PCB), wherein said PCB comprises a front side, a rear side, a hole, at least one inductive coil, and a light source,

US 10,302,088 B2

15

wherein said hole of said PCB allows a shaft member to pass through, wherein said at least one inductive coil is positioned at a predetermined location on said PCB, wherein said light source is positioned at a predetermined location on said PCB and provides lighting or illumination to said jet assembly housing, and wherein said PCB is secured or attached to said base such that said PCB is positioned between said base and said impeller, and

wherein said light source is configured to emit a light that illuminates a first fluid when said magnetic impeller is rotated within said impeller-receiving chamber and causes the first fluid to flow into said inlet aperture and out said outlet aperture.

6. The fluid pump according to claim 1, wherein said front side of said mounting housing member comprises a generally flat section, wherein said base of said jet assembly housing comprises a generally flat section, and wherein a liner is positioned between said generally flat section of said base of said jet assembly housing and said generally flat section of said front side of said mounting housing member such that said contactless, fluid sensor is positioned rearward of the liner.

7. The fluid pump according to claim 6, wherein at least one outlet aperture of said at least one outlet aperture comprises a nozzle, wherein said nozzle and an axis of said fluid pump form an angle of less than 90 degrees.

8. The fluid pump according to claim 6, further comprising a jet assembly rotation locking mechanism for preventing rotation of said jet assembly when said fluid pump is in use or operation.

9. The fluid pump according to claim 6, wherein said jet assembly further comprises a bearing assembly and a shaft assembly,

wherein said bearing assembly comprises at least one bearing member,

wherein said shaft assembly comprises a shaft protection member, and

wherein, when in operational use, said shaft assembly is stationary, said bearing assembly is rotatory around said shaft assembly, and said magnetic impeller is rotatory within said housing of said jet assembly such that fluid is dispensed to the setting.

10. The fluid pump according to claim 6, wherein said contactless, fluid sensor is a contactless, capacitive fluid sensor that allows for capacitive sensing of fluid or water level within the setting, and wherein said jet assembly housing further comprises a printed circuit board (PCB),

wherein said PCB comprises a front side, a rear side, a hole, at least one inductive coil, and a light source, wherein said hole of said PCB allows said shaft member to pass through, wherein said at least one inductive coil is positioned at a predetermined location on said PCB, wherein said light source is positioned at a predetermined location on said PCB and provides lighting or illumination to said jet assembly housing, and wherein said PCB is secured or attached to said base such that said PCB is positioned between said base and said impeller, and

wherein said light source is configured to emit a light that illuminates a first fluid when said magnetic impeller is rotated within said impeller-receiving chamber and causes the first fluid to flow into said inlet aperture and out said outlet aperture.

11. The fluid pump according to claim 10, wherein said jet assembly further comprises a bearing assembly and a shaft assembly,

16

wherein said bearing assembly comprises at least one bearing member,

wherein said shaft assembly further comprises a shaft protection member, and

wherein, when in operational use, said shaft assembly is stationary, said bearing assembly is rotatory around said shaft assembly, and said magnetic impeller is rotatory within said housing of said jet assembly such that fluid is dispensed to the setting.

12. The fluid pump according to claim 1, wherein at least one outlet aperture of said at least one outlet aperture comprises a nozzle, wherein said nozzle and an axis of said fluid pump form an angle of less than 90 degrees.

13. The fluid pump according to claim 1, further comprising a jet assembly rotation locking mechanism for preventing rotation of said jet assembly when said fluid pump is in use or operation.

14. The fluid pump according to claim 1, wherein said mounting housing member further comprises at least one mounting leg.

15. The fluid pump according to claim 14, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.

16. The fluid pump according to claim 4, wherein said bearing assembly comprises at least one bearing member.

17. The fluid pump according to claim 4, wherein said shaft assembly comprises a shaft member.

18. The fluid pump according to claim 16, wherein said at least one bearing member is manufactured of a hard material.

19. The fluid pump according to claim 18, wherein said hard material is a plastic material.

20. The fluid pump according to claim 17, wherein said shaft member is manufactured of a hard material.

21. The fluid pump according to claim 20, wherein said hard material is steel or a metal material.

22. The fluid pump according to claim 9, wherein said at least one bearing member is manufactured of a hard material.

23. The fluid pump according to claim 22, wherein said hard material is a plastic material.

24. The fluid pump according to claim 9, wherein said shaft protection member is manufactured of a hard material.

25. The fluid pump according to claim 24, wherein said hard material is ceramic or a ceramic-type material.

26. The fluid pump according to claim 1, wherein said at least one inlet aperture forms an outer diameter, and wherein said outer diameter of said at least one inlet aperture is smaller than or equal to said outer diameter of said impeller.

27. The fluid pump according to claim 6, where said flat section of the mounting housing member is located a center of said mounting housing member.

28. The fluid pump according to claim 1, wherein said mounting housing member further comprises a gasket.

29. The fluid pump according to claim 1, further comprises a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.

30. A magnetic coupling-type, fluid pump apparatus for dispensing a fluid to a setting in manicure and pedicure industries, said fluid pump apparatus comprising:

a motor assembly comprising a motor;

a jet assembly comprising a jet assembly housing and a magnetic impeller having an outer diameter,

wherein said jet assembly housing comprises a base, a top cover, an impeller-receiving chamber defined by said

US 10,302,088 B2

17

base and said top cover, at least one inlet aperture, and at least one outlet aperture, and wherein said impeller-receiving chamber is dimensioned and configured to receive said impeller and to allow said impeller to rotate within said impeller-receiving chamber;

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member;

a contactless, fluid sensor assembly comprising a contactless, fluid sensor, wherein said contactless, fluid sensor is secured to said mounting housing member such that said contactless, fluid sensor does not make contact with the fluid when in operation, and wherein said sensor is able to detect a fluid level in the setting such that the amount or volume of fluid within the setting can be controlled;

a power source for providing power to said fluid pump; and

a control apparatus for controlling functions of said fluid pump.

31. The fluid pump apparatus according to claim 30, wherein said front side of said mounting housing member comprises a generally flat section, wherein said base of said jet assembly housing comprises a generally flat section, and wherein a liner is positioned between said generally flat section of said base of said jet assembly housing and said generally flat section of said front side of said mounting housing member such that said contactless, fluid sensor is positioned rearward of the liner.

32. The fluid pump apparatus according to claim 30, wherein said jet assembly further comprises a bearing assembly and a shaft assembly.

33. The fluid pump apparatus according to claim 30, further comprising a jet assembly rotation locking mechanism for preventing rotation of said jet assembly when said fluid pump is in use or operation.

34. The fluid pump apparatus according to claim 30, wherein said mounting housing member further comprises at least one mounting leg.

35. The fluid pump apparatus according to claim 34, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.

36. The fluid pump according to claim 32, wherein said bearing assembly comprises at least one bearing member.

37. The fluid pump according to claim 32, wherein said shaft assembly comprises a shaft protection member.

38. The fluid pump apparatus according to claim 32, wherein said at least one bearing member is manufactured of a hard material.

39. The fluid pump apparatus according to claim 38, wherein said hard material is a plastic material.

40. The fluid pump apparatus according to claim 37, wherein said shaft member is manufactured of a hard material.

41. The fluid pump apparatus according to claim 40, wherein said hard material is steel or a metal material.

42. The fluid pump apparatus according to claim 30, further comprises a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.

18

43. A spa tub in manicure and pedicure industries comprising:

a basin that is configured for mounting a magnetic coupling-type fluid pump; and

said magnetic coupling-type fluid pump comprising:

a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted on said motor shaft,

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of said basin in the manicure and pedicure industries,

a securing mechanism to secure said mounting housing member to said wall of said basin, and

a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller comprising a magnetic plate, and a jet assembly housing,

wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, at least one inlet aperture, and at least one outlet aperture, wherein

said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member,

wherein said bearing assembly comprises at least one bearing member,

wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,

wherein said shaft assembly comprises said shaft member and said shaft protection member,

wherein said shaft member extends through said inner surface of said jet assembly housing.

44. The spa tub according to claim 43, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.

45. The spa tub according to claim 43, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.

46. The spa tub according to claim 43, wherein, when in operational use, said shaft assembly is stationary.

47. The spa tub according to claim 43, wherein said at least one bearing member is an outer bearing member and an inner bearing member.

48. The spa tub according to claim 43, wherein said base of said shaft protection member is a base having a central hole.

49. The spa tub according to claim 43, wherein said base of said shaft protection member is manufactured of ceramic or a ceramic-type material.

50. The spa tub according to claim 43, wherein said base of said shaft protection member is polished.

51. The spa tub according to claim 43, wherein said shaft member is manufactured of steel or a metal material.

52. The spa tub according to claim 43, wherein said shaft assembly is secured about a center of an inner surface of said base of said jet assembly housing.

53. The spa tub according to claim 43, wherein said shaft assembly and said bearing assembly align an axis of rotation of said magnetic impeller with an axis of rotation of the magnetic plate mounted on said motor.

54. The spa tub according to claim 43, wherein said mounting housing member further comprises a gasket.

US 10,302,088 B2

19

55. The spa tub according to claim 43, wherein said mounting housing member further comprises at least one mounting leg.

56. The spa tub according to claim 55, wherein said securing mechanism is at least one wing nut, and wherein said at least one mounting leg is dimensioned and configured for receiving said at least one wing nut.

57. The spa tub according to claim 43, wherein said jet assembly housing further comprises a printed circuit board (PCB),

wherein said PCB comprises a front side, a rear side, a hole, at least one inductive coil, and a light source, wherein said hole of said PCB allows said shaft member to pass through, wherein said at least one inductive coil is positioned at a predetermined location on said PCB, wherein said light source is positioned at a predetermined location on said PCB and provides lighting or illumination to said jet assembly housing, and wherein said PCB is secured or attached to said base such that said PCB is positioned between said base and said impeller, and

wherein said light source is configured to emit a light that illuminates a first fluid when said magnetic impeller is rotated within said impeller-receiving chamber and causes the first fluid to flow into said inlet aperture and out said outlet aperture.

58. The spa tub according to claim 43, wherein said magnetic plate of said magnetic impeller is fully enclosed.

59. The spa tub according to claim 43, further comprising a rotation locking mechanism for preventing rotation of said jet assembly when said pump is in use or operation.

60. The spa tub according to claim 59, wherein said magnet plate of said magnetic impeller is fully enclosed.

61. The spa tub according to claim 43, wherein said mounting housing member further comprises a generally flat section that is at least 10% of said top surface for accom-

20

modating a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.

62. The spa tub according to claim 43, further comprises a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.

63. The spa tub according to claim 47, wherein said outer bearing member is manufactured of a plastic material.

64. The spa tub according to claim 47, wherein said inner bearing member is manufactured of a rubber material.

65. The spa tub according to claim 43, wherein said at least one inlet aperture forms an outer diameter, and wherein said outer diameter of said at least one inlet aperture is smaller than or equal to said outer diameter of said impeller.

66. The spa tub according to claim 43, wherein said at least one outlet aperture comprises a nozzle, wherein said nozzle and an axis of said fluid pump form an angle of less than 90 degrees.

67. The spa tub according to claim 43, wherein said shaft assembly is secured to said base of said jet assembly housing.

68. The spa tub according to claim 43, wherein said bearing assembly is secured to a center of said magnetic impeller.

69. The spa tub according to claim 43, further comprising a contactless, fluid sensor assembly comprising a contactless, fluid sensor.

70. The spa tub according to claim 69, wherein said contactless, fluid sensor is secured to said mounting housing member such that said contactless, fluid sensor does not make contact with the fluid when in operation, and wherein said contactless, fluid sensor is able to detect a fluid level in the setting such that the amount or volume of fluid within the setting can be controlled.

* * * * *

LURACO’S FIRST AMENDED INFRINGEMENT CONTENTIONS RE:
US10302088

1. Plaintiff Luraco Health & Beauty, LLC (“Luraco”), hereby provide its first amended infringement contentions against defendants Christopher Lac Luong, Sam Nguyen, Lxor Inc., Lxor Manufacturing LLC (“Lxor Mfg.”), Lxor Store, LLC, Ecojet Inc. (“Ecojet”), and Pro Spa Depot, LLC. In this document, all the defendants are corporately referenced as “Defendants”.
2. Luraco alleges that Lxor, Inc, Lxor Store, LLC, Pro Spa Depot, LLC, and Lxor Mfg sell products made by Lxor Mfg. and Ecojet.
3. Lxor, Inc., Ecojet, Lxor Mfg., Lxor Store, LLC, Lxor, Inc. and Pro Spa Depot, LLC are believed to be owned and managed by Christopher Lac Luong and Sam Nguyen.
4. The EcoJet II Magnetic Drive (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Whirlpool Magnetic Jet System (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Magnetic Wet-End (aka the “Ecojet Universal 3.5 Shafted”), Ecojet MD 3.0 Shafted, and Ecojet MD 3.0 Shafted (with motor and mounting housing) are manufactured and sold by Lxor Manufacturing, LLC, which also is believed to licenses use of its patents to Ecojet.
5. Faithful snapshots of the infringing products are shown below:



Image from Exhibit 20 of Amended Complaint



Image From Exhibit 19 of Amended Complaint

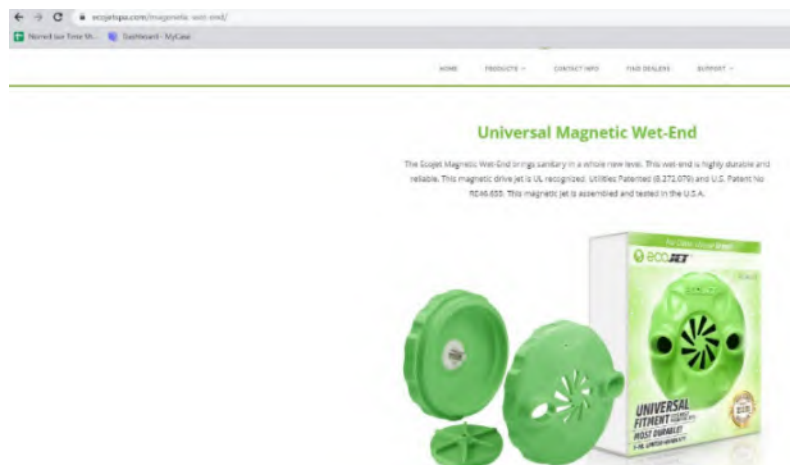


Image from Exhibit 19 of Amended Complaint



Image from Exhibit 20 of Amended Complaint

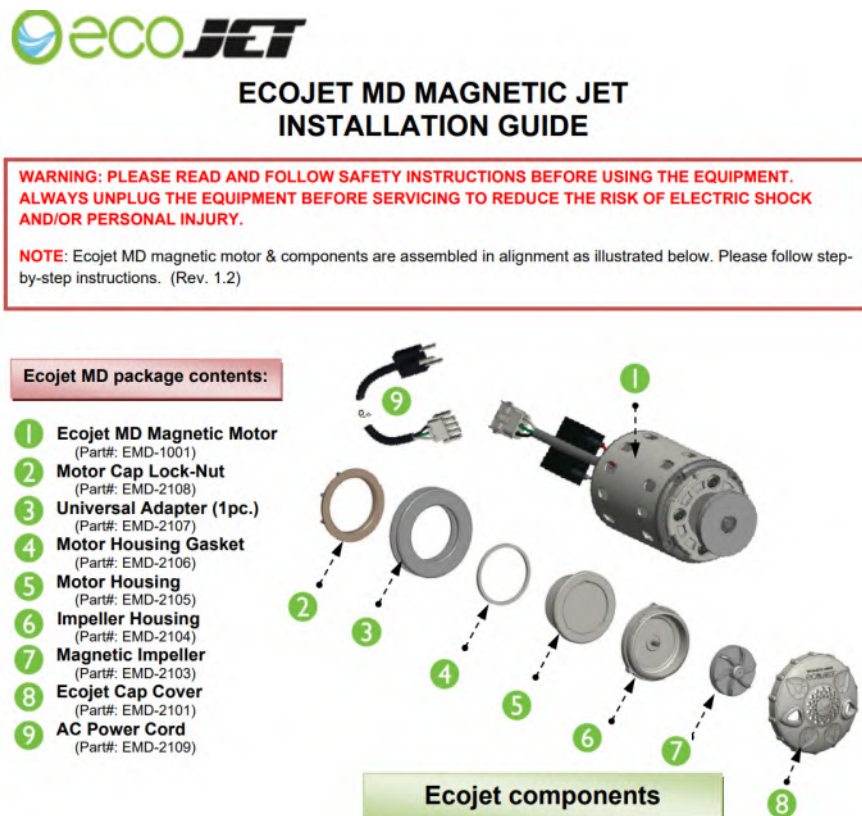


Image from Exhibit 15 of Amended Complaint

6. The charts showing infringement of US 10,215,178 are attached as Exhibit 8a. Luraco may supplement or amend this set of contentions based on further analysis.

US 10,302,088 Claim Language	Evidence of Infringement of Ecojet MD 3.0 (Shafted)
43. A spa tub in manicure and pedicure industries comprising:	Lexor sells a plurality of spa tubs that accept both the shafted and shaftless models. Lexor's previous spa tub models accepted the Ecojet MD 3.0. Universal 3.0 models. See Fig.20-23. Additionally the current spa tub models are able to accept the EcoJet MD 3.0 models and are for sale at https://lexor.com/collections/spa-chair/Pedicure-Spa-Chair+Pedi-spa . See Fig. 25-48.
a) a basin that is configured for mounting a magnetic coupling-type fluid pump; and	As shown in Fig. 20-23 Lexor pedicure spas feature a basin configured for mounting the Ecojet MD 3.0.
b) said magnetic coupling-type fluid pump comprising:	The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html . See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html . See Fig 4.
c) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted on said motor shaft,	As shown in Fig. 7(1-3) the pump comprises a motor, a motor shaft, and a magnetic plate mounted on the motor shaft.
d) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of said basin in the manicure and pedicure industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of said basin in the manicure and pedicure industries.
e) a securing mechanism to secure said mounting housing member to said wall of said basin, and	As shown in Fig. 24(1) the mounting housing comprises a locking ring to secure the mounting housing member to the wall of the basin.
f) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller comprising a magnetic plate, and a jet assembly housing,	As shown in Fig. (1 and 6), 12(1-2 and 5), and 14(5) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller comprising a magnetic plate, and a jet assembly housing.

g) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, at least one inlet aperture, and at least one outlet aperture, wherein	As shown in Fig. 8(1, 3-5, and 7-10) and 11(1-3 and 6-7) the jet assembly housing comprises an inner surface, outer surface, a base, a front cover, an inlet aperture and an outlet aperture.
h) said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member,	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while the motor assembly is secure to the bottom surface of the mounting housing member.
i) wherein said bearing assembly comprises at least one bearing member,	As seen in Figures 12(5), 13(5-7), and 14(8) the bearing assembly comprises at least one bearing member.
j) wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,	As shown in Fig. 8(6), 12(1-6), and 13(1-10) bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use.
k) wherein said shaft assembly comprises said shaft member and said shaft protection member,	As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises a shaft member and the shaft protection member.
l) wherein said shaft member extends through said inner surface of said jet assembly housing.	As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.
44. The spa tub according to claim 43, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 13(6) the outer bearing is made of plastic.
45. The spa tub according to claim 43, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.	As shown in Fig. 13(7) the inner bearing member manufactured of a rubber material (or rubber-like material) that is able to absorb vibration during operational use.

46. The spa tub according to claim 43, wherein, when in operational use, said shaft assembly is stationary.	As shown in Fig. 12(2- 3) and 13(1 and 3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operation.
47. The spa tub according to claim 43, wherein said at least one bearing member is an outer bearing member and an inner bearing member.	As shown in Fig.13(5-7) the bearing assembly comprises an outer bearing member and an inner bearing member.
48. The spa tub according to claim 43, wherein said base of said shaft protection member is a base having a central hole.	As shown in Fig. 12(4) and 13(2) the base of the shaft protection member is a base having a central hole.
49. The spa tub according to claim 43, wherein said base of said shaft protection member is manufactured of ceramic or a ceramic-type material.	As shown in Fig. 12(4) and 13(2) the base of the shaft protection member is manufactured of ceramic or ceramic-type material.
50. The spa tub according to claim 43, wherein said base of said shaft protection member is polished.	As shown in Fig. 12(4) and 13(2) the base of the shaft protection member is polished.
51. The spa tub according to claim 43, wherein said shaft member is manufactured of steel or a metal material.	As shown in 12(3) and 13(3) the shaft member is manufactured of steel.
52. The spa tub according to claim 43, wherein said shaft assembly is secured about a center of an inner surface of said base of said jet assembly housing.	As shown in Fig. 8(10), 12(2), and 13(1) the shaft assembly is secured about the center of the inner surface of the base of the jet assembly housing.
53. The spa tub according to claim 43, wherein said shaft assembly and said bearing assembly align an axis of rotation of said magnetic impeller with an axis of rotation of the magnetic plate mounted on said motor.	As shown in Fig. 6(3), 7(1-3), 8(6), 9(1-3), 12(1-3 and 5-6), and 13(1, 3, and 4-5) the shaft assembly and bearing assembly align an axis of rotation of the magnetic impeller with an axis of rotation of the magnetic plate mounted on the motor.
54. The spa tub according to claim 43, wherein said mounting housing member further comprises a gasket.	As shown in Fig. 5(2 and 4) the mounting housing member comprises a gasket.
58. The spa tub according to claim 43, wherein said magnetic plate of said magnetic impeller is fully enclosed.	As shown in Fig. 14(5) the magnetic plate of the magnetic impeller is fully enclosed.
59. The spa tub according to claim 43, further comprising a rotation locking mechanism for preventing rotation of said jet assembly when said pump is in use or operation.	As shown in Fig.10(1-4 and 6) the jet assembly includes a locking mechanism to prevent rotation of jet assembly when pump is in use or operation.

60. The spa tub according to claim 59, wherein said magnet plate of said magnetic impeller is fully enclosed.	As shown in Fig. 14(5) the magnetic plate of the magnetic impeller is fully enclosed.
61. The spa tub according to claim 43, wherein said mounting housing member further comprises a generally flat section that is at least 10% of said top surface for accommodating a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.	As shown in Fig. 7(4), 8(2), 10(1), and 18 the mounting housing member comprises a flat section that is at least 10% of the top surface and accommodates a liner to be positioned between the base of the jet assembly housing and the top surface of the mounting housing member.
62. The spa tub according to claim 43, further comprises a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.	As shown in Fig. 17-18 the spa tub comprises a liner being positioned between the base of the jet assembly housing and the top surface of the mounting housing member.
63. The spa tub according to claim 47, wherein said outer bearing member is manufactured of a plastic material.	As shown in Fig. 13(6) the outer bearing is made of plastic.
64. The spa tub according to claim 47, wherein said inner bearing member is manufactured of a rubber material.	As shown in Fig. 13(7) the inner bearing is made of rubber.
65. The spa tub according to claim 43, wherein said at least one inlet aperture forms an outer diameter, and wherein said outer diameter of said at least one inlet aperture is smaller than or equal to said outer diameter of said impeller.	As shown in Fig. 16(4-5) at least one inlet aperture forms an outer diameter, and the diameter is equal to or smaller than the outer diameter of the impeller.
66. The spa tub according to claim 43, wherein said at least one outlet aperture comprises a nozzle, wherein said nozzle and an axis of said fluid pump form an angle of less than 90 degrees.	As shown in Fig. 6(4), 15(10), and 16(6) the at least one outlet aperture comprises a nozzle, where the nozzle and the axis of the fluid pump form an angle of less than 90 degrees.
67. The spa tub according to claim 43, wherein said shaft assembly is secured to said base of said jet assembly housing.	As shown in Fig. 12(2) and 13(1) the shaft assembly is secured to the base of the jet assembly housing.
68. The spa tub according to claim 43, wherein said bearing assembly is secured to a center of said magnetic impeller.	As shown in Fig. 12(1 and 5), 13(4-5), and 14(8) the bearing assembly is secured to a center of the magnetic impeller.

Figures for the Ecojet MD 3.0 **(Shafted Model)**

ECO magnetic drive jet

Option - complete set (wet cover + dry motor)



FREE
SHIPPING
continental US only

<https://ecojetspa.com/product/ecojet-md-magnetic-jet-set/>



HOME

PRODUCTS ▾

CONTACT INFO

FIND DEALERS

SUPPORT ▾



Ecojet Magnetic Drive Jet Set (Retail)


\$199.00

Ecojet Magnetic Whirlpool Motor (Design for Pedicure Spa Chair).

The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized, Utilities Patented (8,272,079) and U.S. Patent No RE46,655. This magnetic jet is assembled and tested in the U.S.A.

This kit is design to fit most spa chairs in the market. The Ecojet Magnetic Drive Jet will fit the standard 3 inch diameter cut out

Figure 3




PSDTM
Pedicure Spa & Salon Furniture Wholesaler

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US F


HOME / ECOJET FRONT HOUSING SET

Product Code: Ecojet Front Housing Set

ECOJET FRONT HOUSING SET



[Add to Wishlist](#) [Add to Compare](#)



DETAILS

Ecojet Replacement Magnetic Impeller Housing Set (3pcs. Kit).

The Ecojet Magnetic Impeller Housing set is a direct housing and impeller replacement for the Ecojet Magnetic Drive Jet Set. The set comes with cap cover, magnetic impeller, and the impeller housing.

Ecojet Impeller Housing contents:

Ecojet MD Cap Cover
Ecojet MD Magnetic Impeller
Ecojet MD Impeller Housing

RELATED PRODUCTS

Figure 4

SpaSalon.us wholesale


Search products [» advanced search](#)

[PEDICURE CHAIRS](#) [NAIL](#) [HAIR](#) [SPA](#) [DECOR](#) [PARTS](#) [SUPPLIES](#) [PACKAGE DEALS](#)

[Home](#) / [Spa Parts](#) / [ECO magnetic jet - old](#)

ECO magnetic jet - old

★★★★★ [7 reviews](#) [Write a review](#)




Option :

make your selection, price will show

Faster shipping :

Price in points



[Description](#) [Email](#) [Reviews ⁷](#) [Shipping & Warranty](#) [Downloads](#) [How to](#) [Video gallery](#)

[Description](#) [Email](#) [Reviews ⁷](#) [Shipping & Warranty](#) [Downloads](#) [How to](#) [Video gallery](#)

ECO magnetic jet - old

Ecojet Impeller Housing contents:

- Ecojet MD Cap Cover
- Ecojet MD Magnetic Impeller
- Ecojet MD Impeller Housing

Ecojet Replacement Magnetic Whirlpool Motor.

- The Ecojet Replacement Magnetic Whirlpool Motor comes with a two-year warranty. We assemble and test the motor in the U.S.A.
- This motor has an internal cooling system to prevent overheating. This is a direct motor replacement for the Ecojet Magnetic Drive Jet Set.

The Ecojet MD package contents:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter (2pcs.)
- Motor Housing Gasket
- Motor Housing (3.5 inches)
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card (2pcs.)

Figure 5

2. Mounting Housing (configured to mount to wall of pedicure basin)

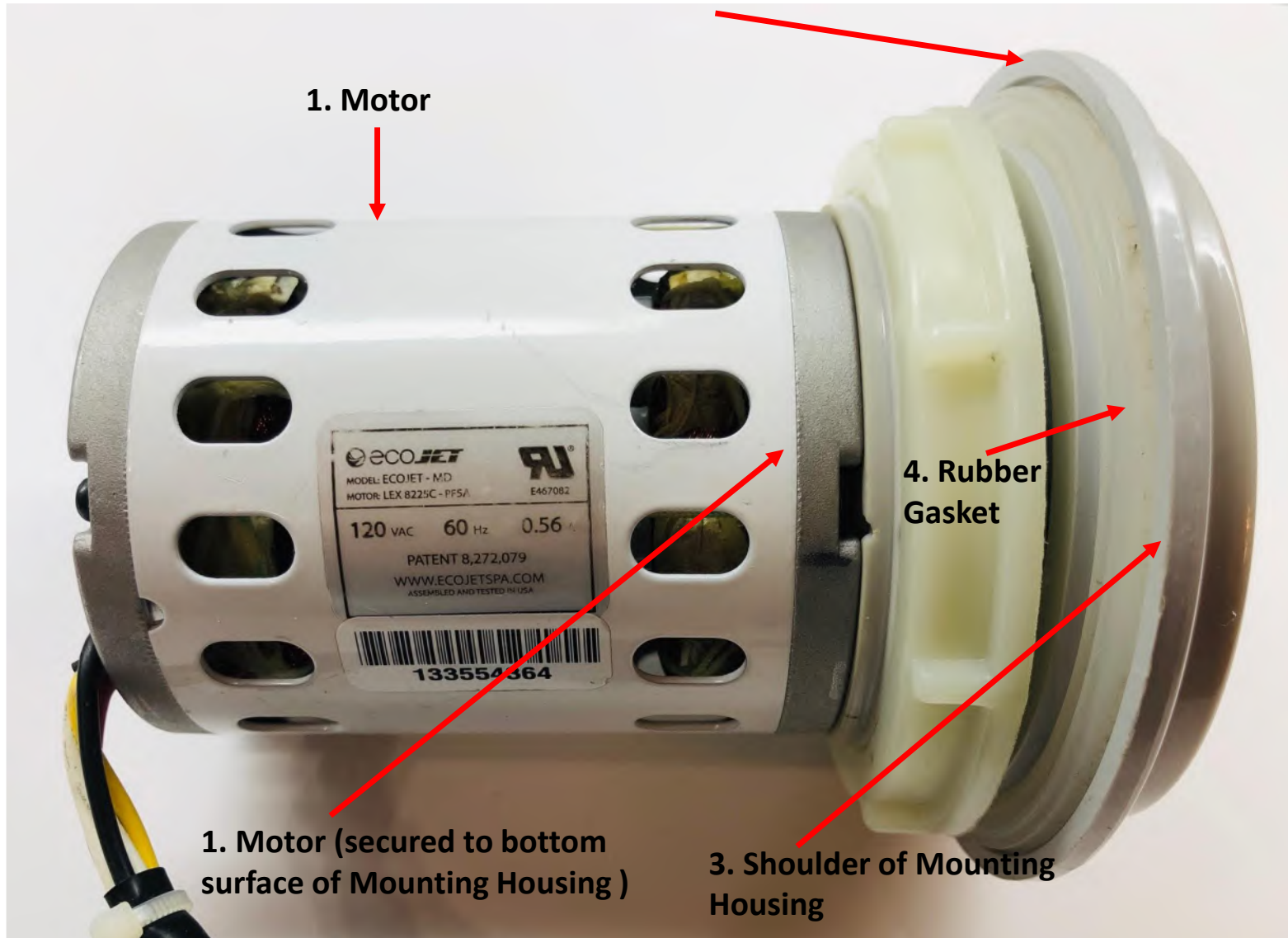


Figure 6

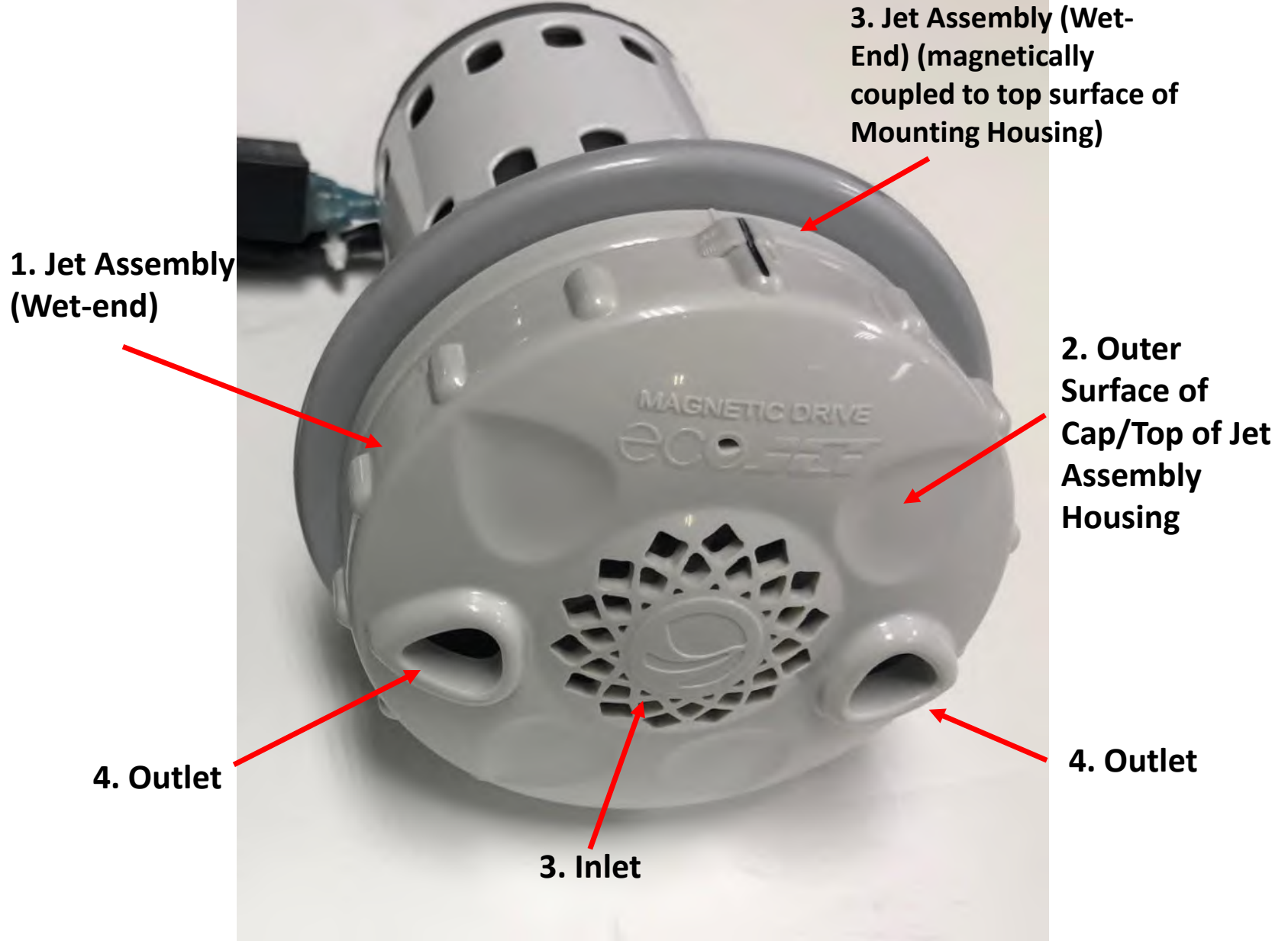


Figure 7

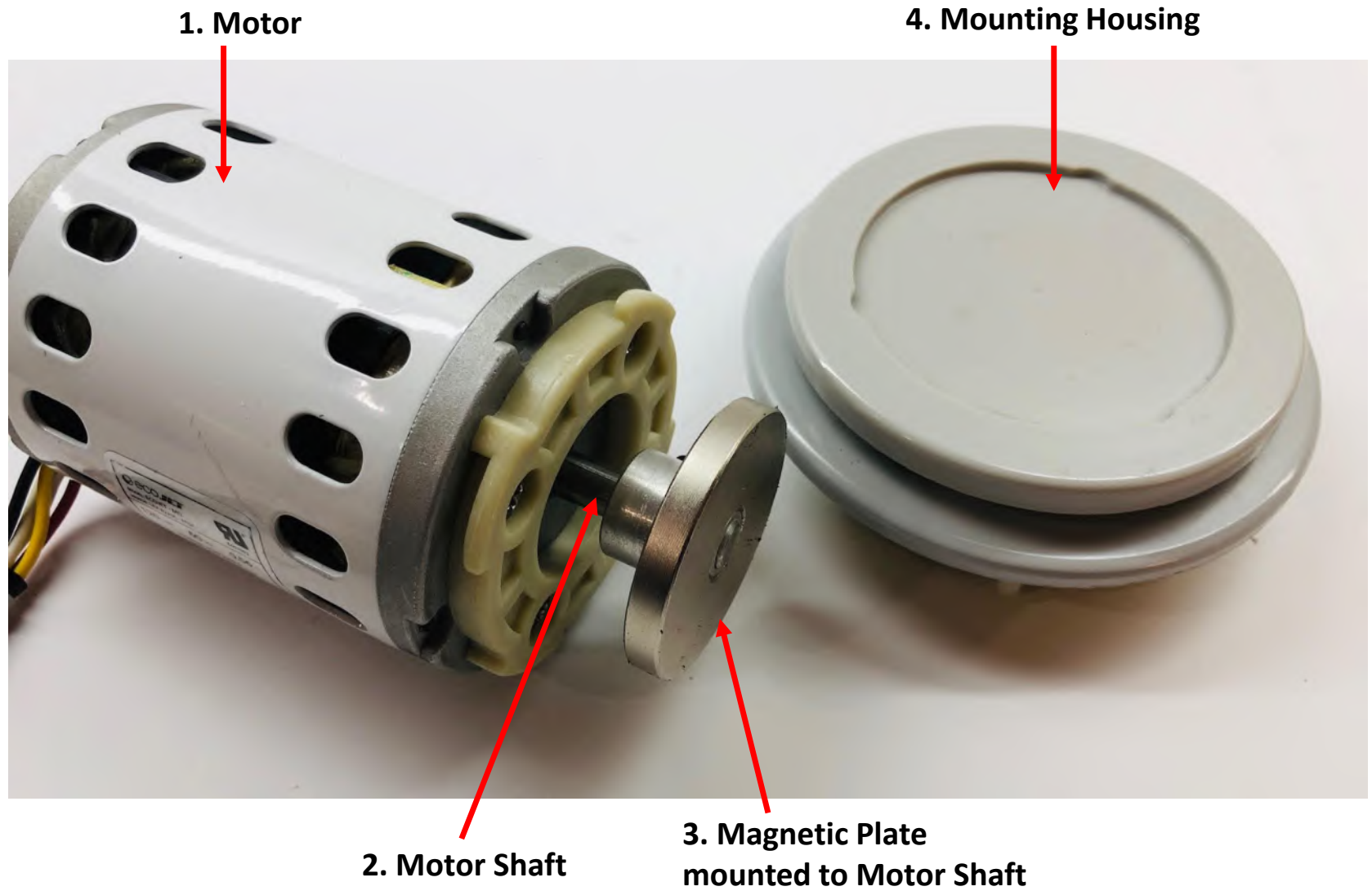
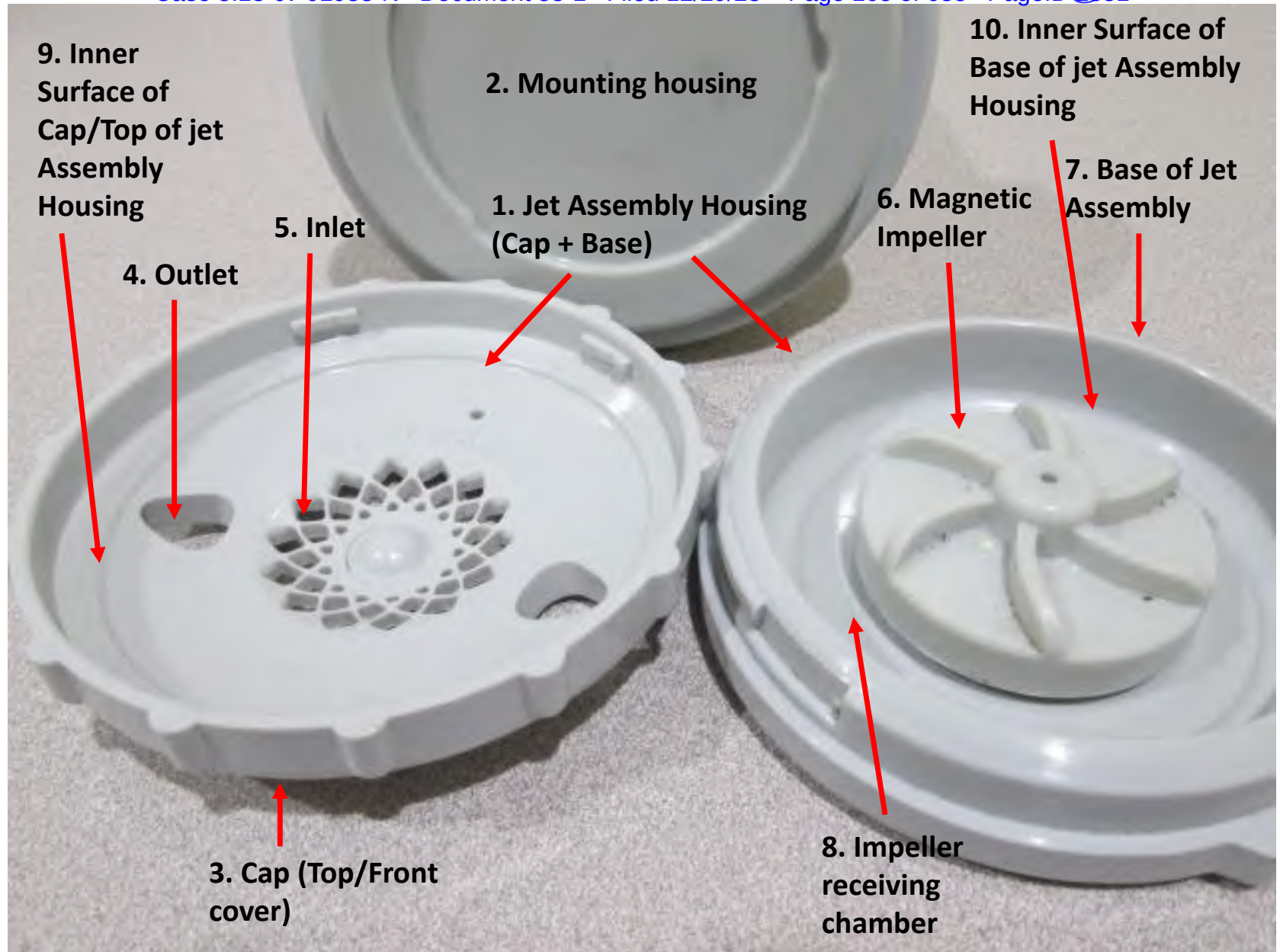


Figure 8



ECO magnetic drive jet

Option - complete set (Wet cover + dry motor)

3. Magnetic Plate (Attached to motor shaft contained Inside of mounting housing)

1. Magnetic Impeller



2. Mounting Housing
front view

This image shows that the Magnetic Plate and Magnetic Impeller rotate on the same axis



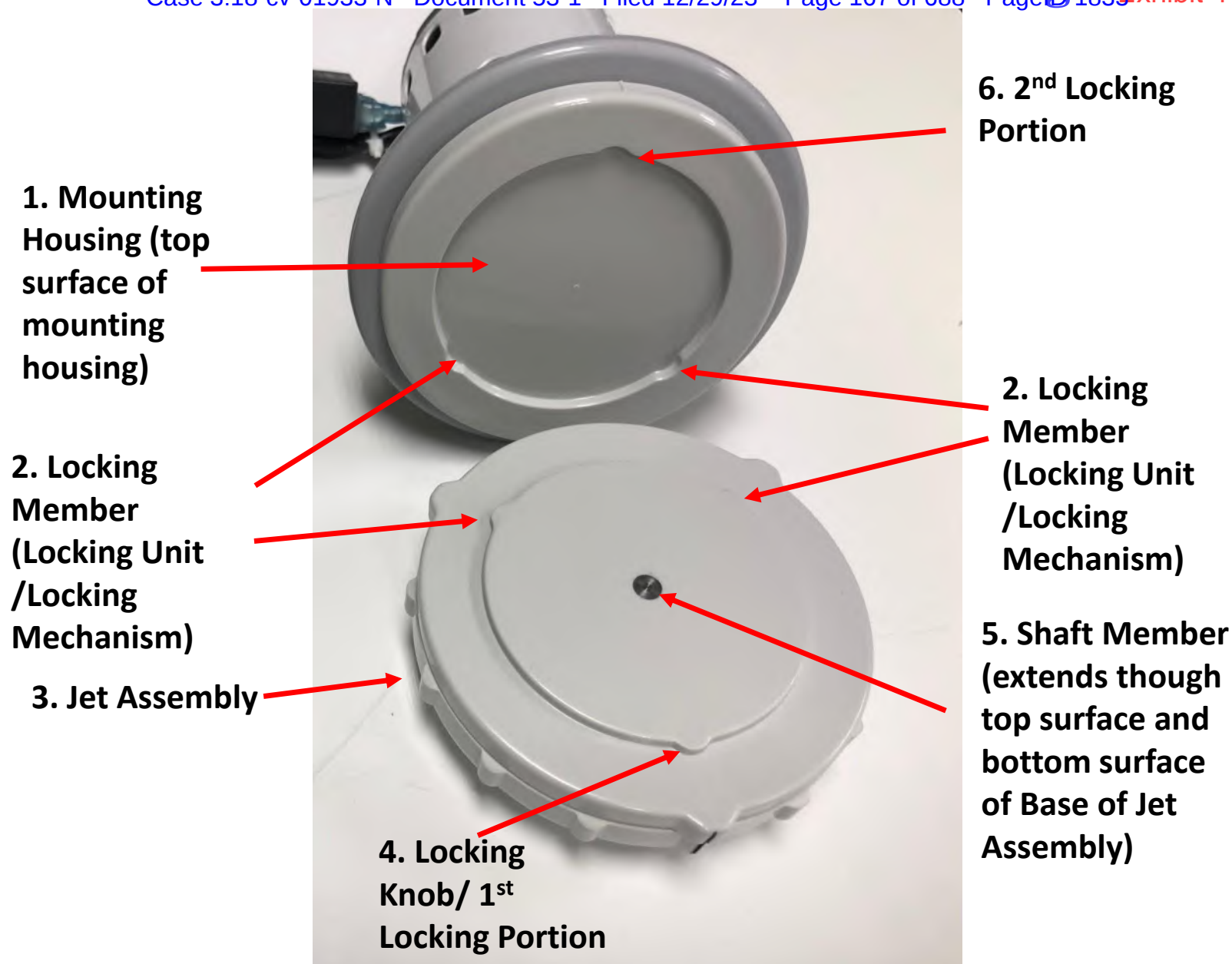
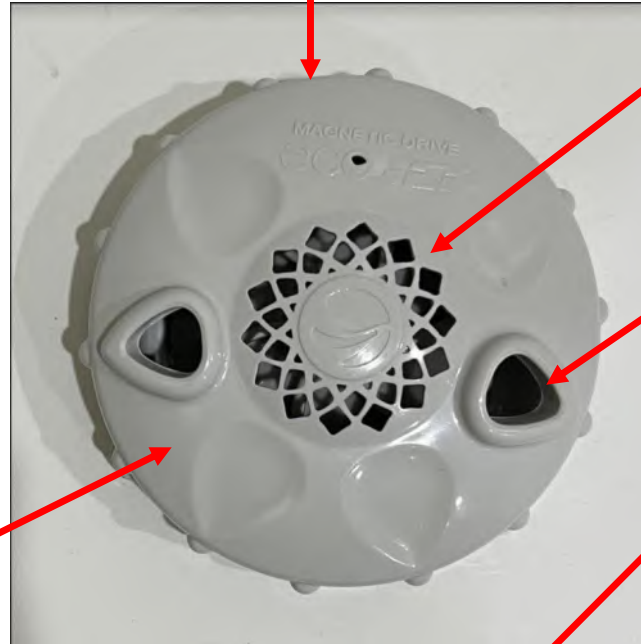


Figure 11

1. Jet Assembly

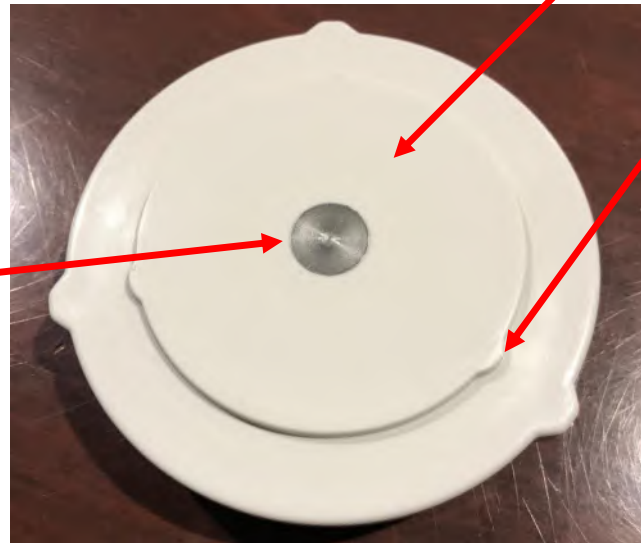


2. Inlet

3. Outlet

**7. Outer Surface
of Cap/Top of jet
Assembly
Housing**

**6. Outer Surface of
Base/Bottom of Jet
Assembly Housing**



**4. Locking Knob
(locking mechanism)**

**5. Shaft Member
(extends though
top surface and
bottom surface
of Base of Jet
Assembly)**

Figure 12

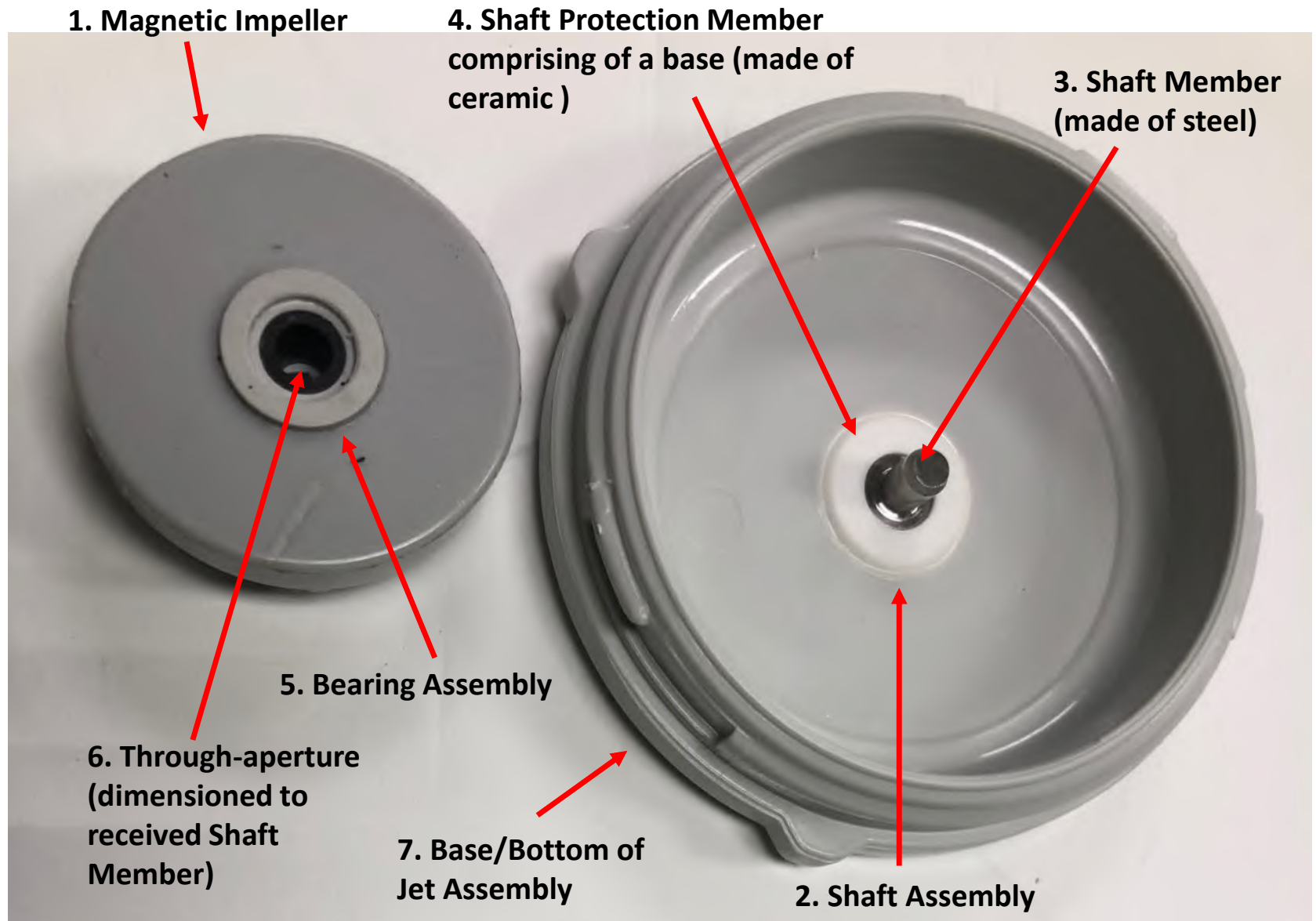


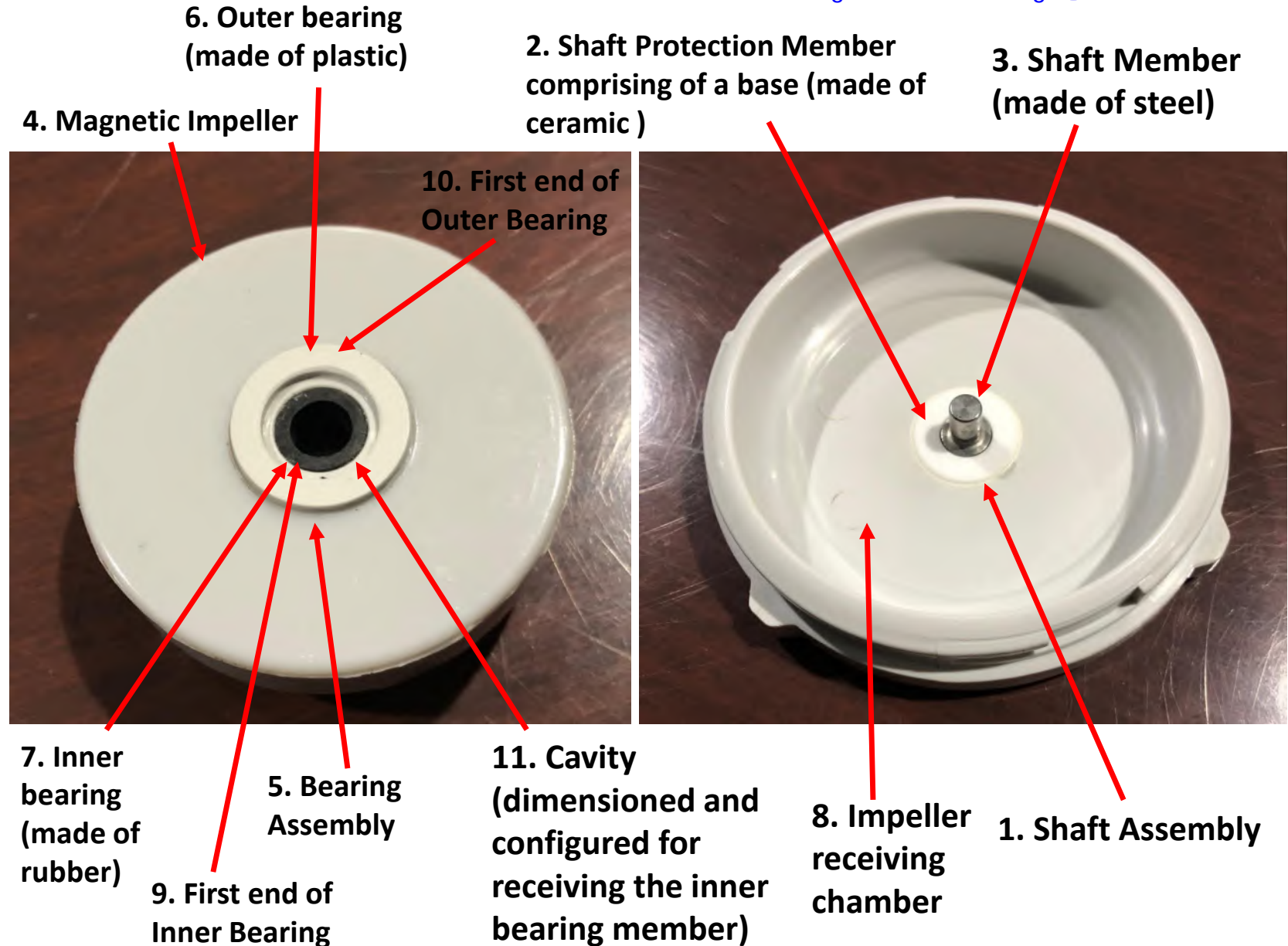
Figure 13

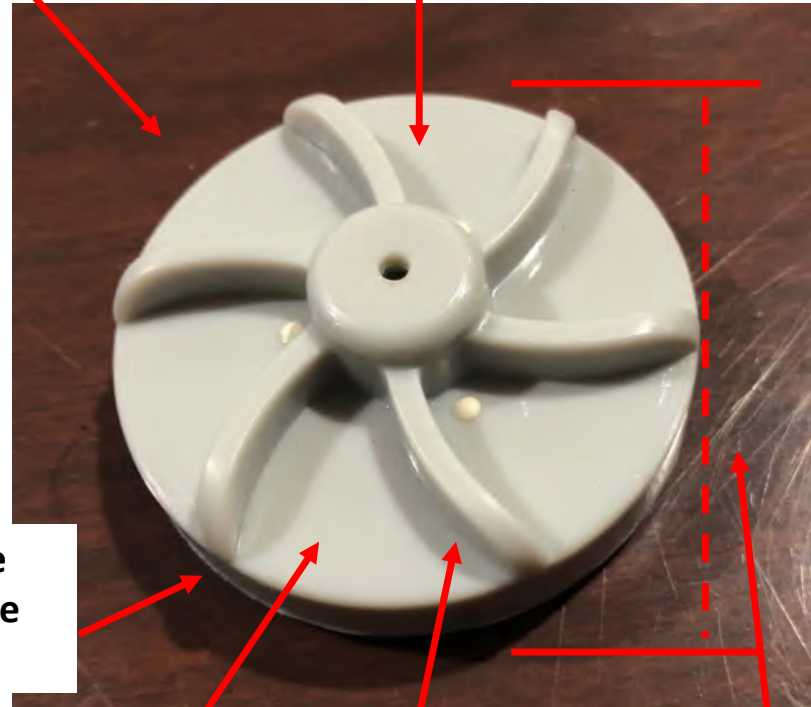
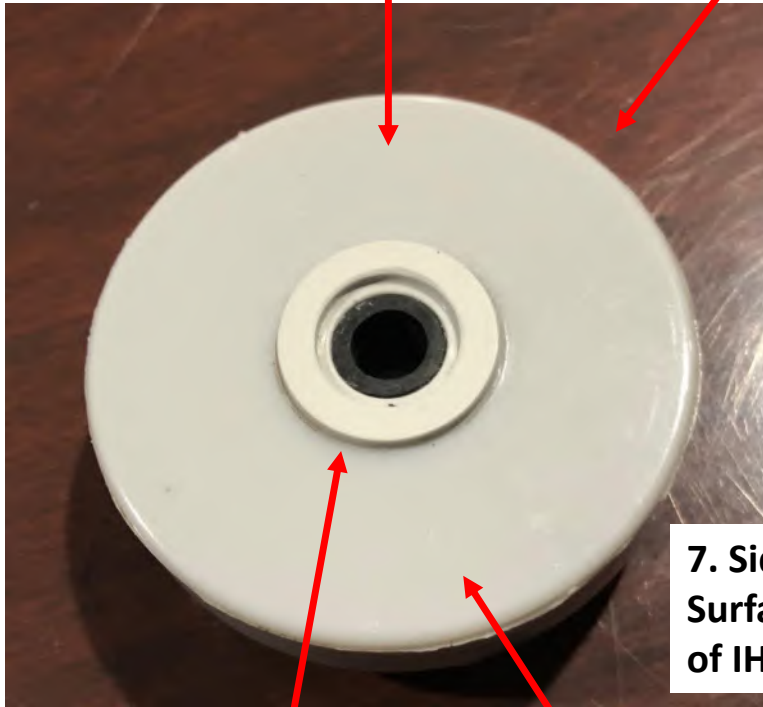
Figure 14

Magnetic Impeller

2. Bottom/Lower Surface of IH

3. Impeller housing ("IH")

4. Top/Upper Surface of IH



7. Side Surface of IH

8. Bearing Assembly

5. Magnetic plate/disk is fully enclosed within Impeller Housing

1. Arm Member

6. Outer Diameter

Figure 15

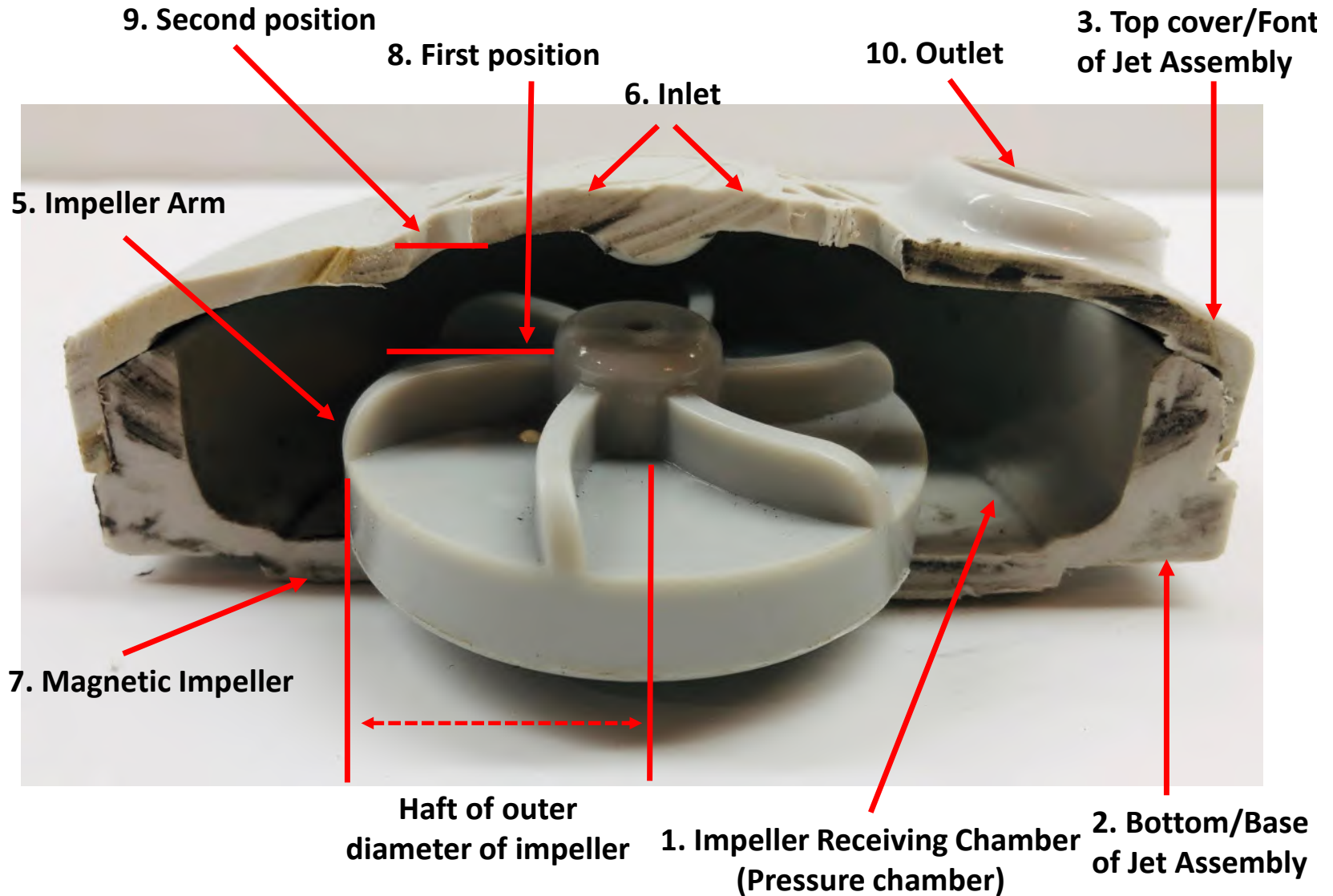
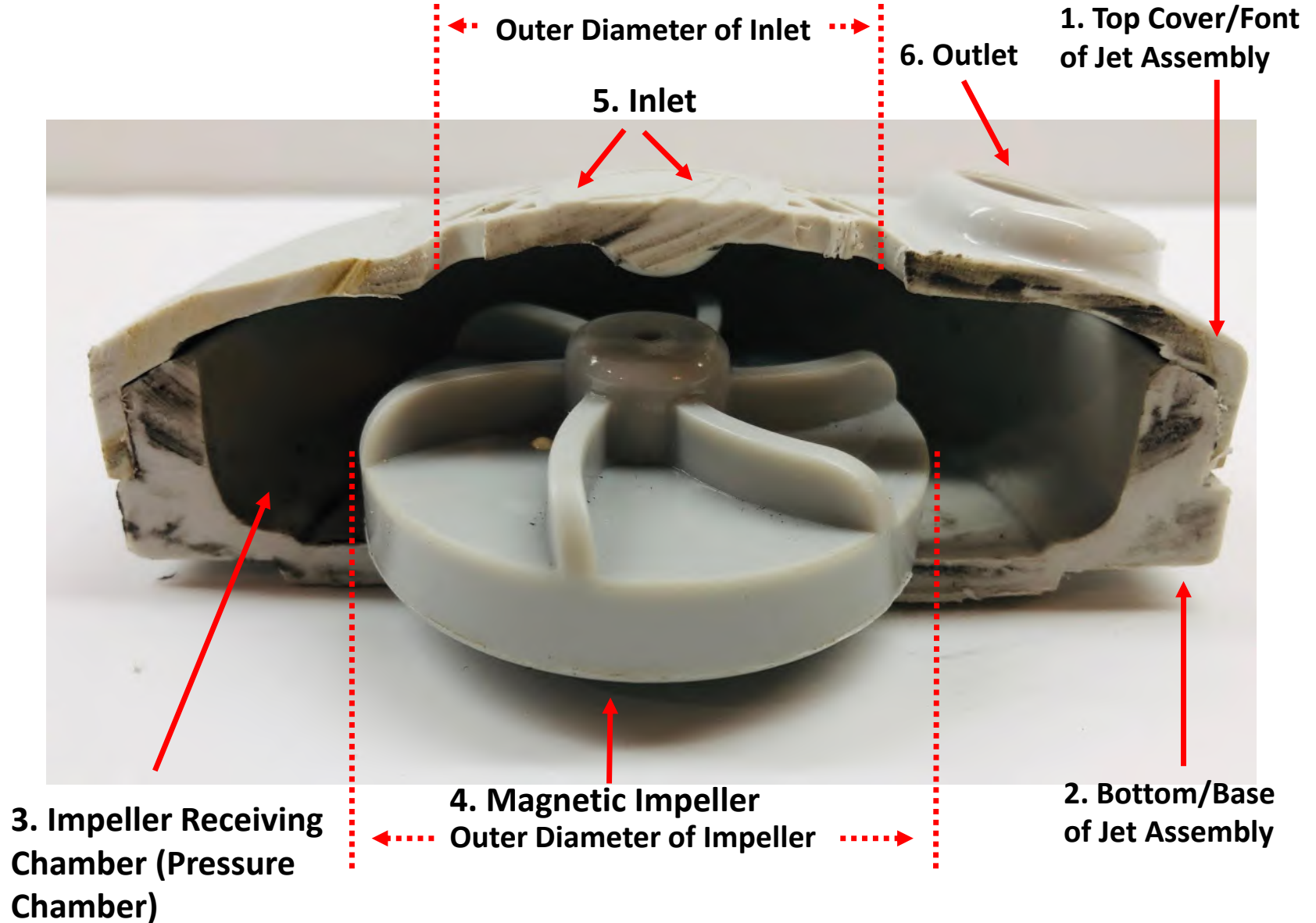




Figure 16

← → ↻ 📄 lexor.com/products/disposable-liners-200ct?variant=42120649212070

age Starts At **\$2495** **FREE SHIPPING** For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key


 **Lexor®** [PEDICURE CHAIRS](#) [PROMOTIONS](#) [SPECIAL FEATURES](#) [SALON FURNITURE](#) [PARTS & ACCESSORIES](#) [SHOWROOMS](#)



Disposable Liners (200ct)

EcoJet

\$25.00

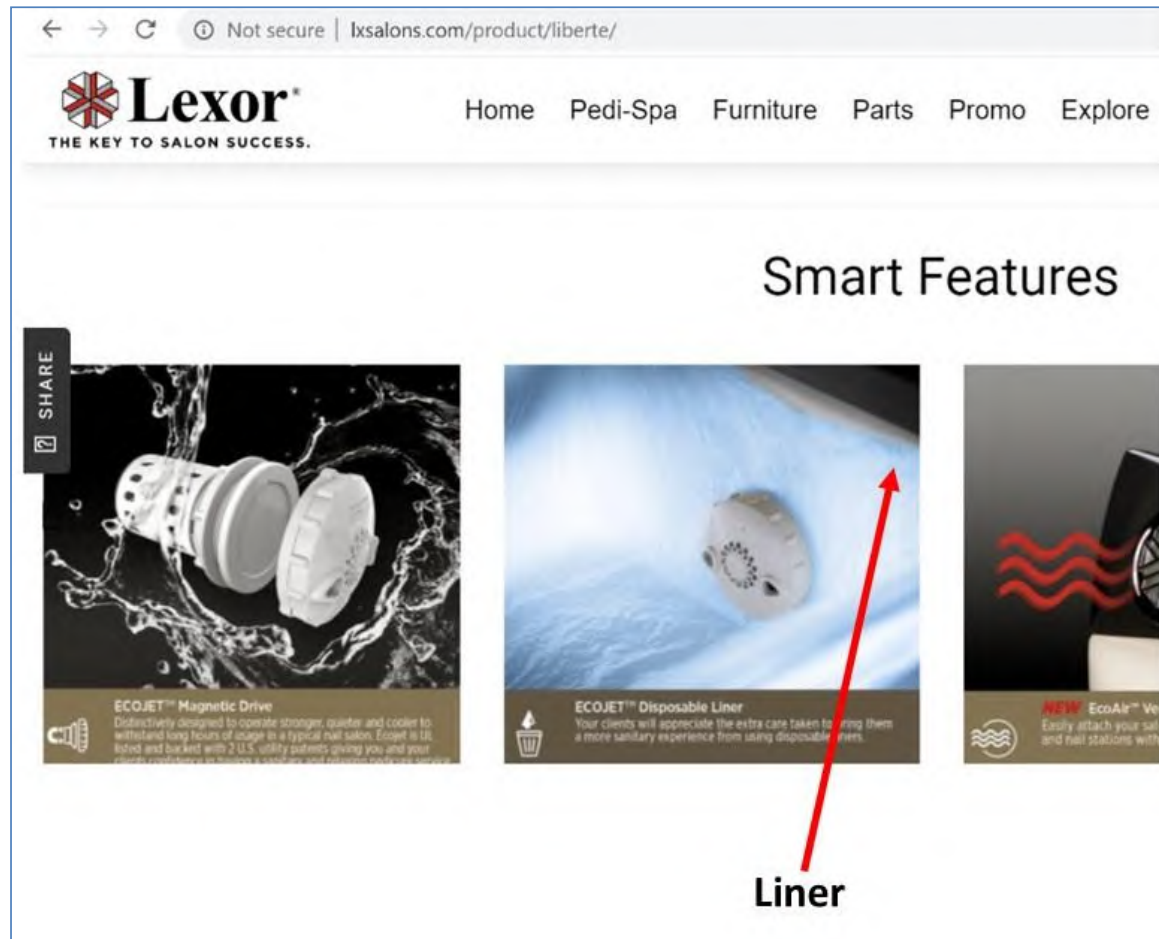
From \$2.31/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.



**1. Outer diameter
of Shaft Protection
Member**

**2. Outer diameter
of Outer Bearing
Member**



1. Prestige model



https://www.youtube.com/watch?time_continue=26&v=kuwENge4QyU (Second 20 shows EcoJet)



(Cropped on Oct 19, 2020)

2. Model Elite



https://www.youtube.com/watch?time_continue=4&v=j3YRg7n8_Pc (Second 19 shows EcoJet)

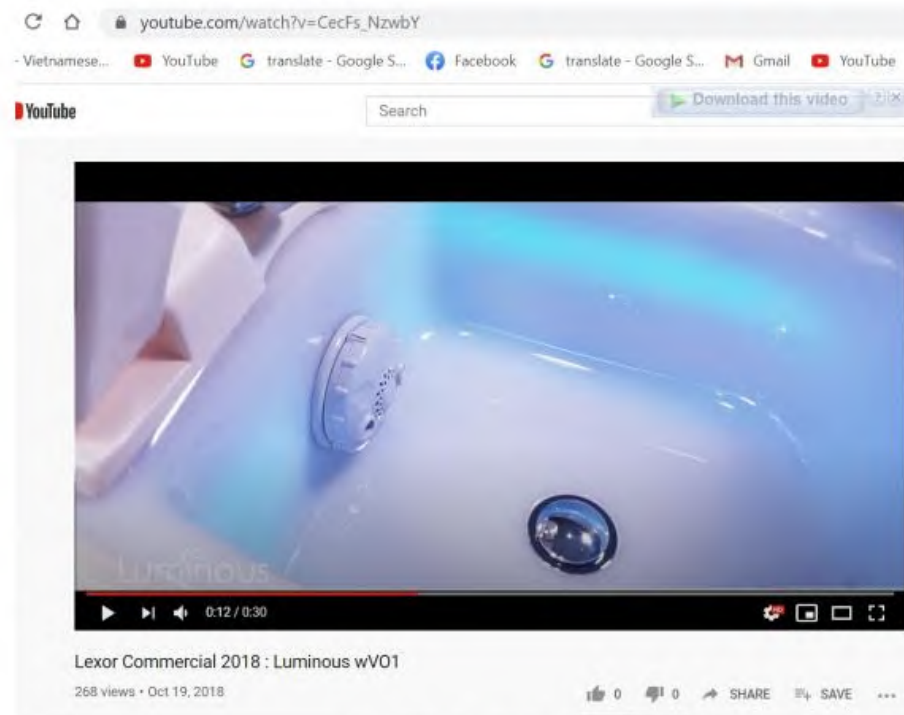


(Cropped on Oct 19, 2020)

3. Model Luminous



https://www.youtube.com/watch?v=CecFs_NzwbY (Second 22 mentions EcoJet)



6. Liberte model



Not secure | lexorcanada.com/product/liberte/

YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for

Not secure | lexorcanada.com/product/liberte/

YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for

Lexor®
Smart Pedi-Spa. Smart Choice.

PEDICURE SPA FURNITURE ACCESSORIES SPA PARTS CONTACT

Description

Description

For those salons that are constantly pushing the boundaries of class and elegance, Lexor presents: The Liberte™. Keep your clients in awe as they partake in this limitless experience. From the luxurious and high-performing Ultraleather™, to the elegant wood trim to the glowing Aurora LED Color-Changing Bowl, the Liberte™ boasts exclusive stature that only others dream of.

Smart Features:

- Ecojet™ Magnetic Drive (Patent no: RE45844)
- Ecojet™ Disposable Liner
- Tru-Touch™ Shiatsu Massage System (tapping, kneading, rolling, etc.)
- Adjustable Footrest for Comfort

Additional Features:

- 1-Year Limited Warranty
- Includes Classic Curve Pedicure Stool (matching cushion color and adjustable height)
- Supple Leather Cushion
- Fully Functioning Power Seats
- Remote Control (controls seats and massage system)
- Construction: Marble Composite, High Gloss, Acetone-proof Gel Coat
- Foldable Manicure Trays with Removable Cup Holders
- Lift-up Armrest for Easy Access
- Purse/Handbag Hook
- Crystal Bowl

Cropped on Oct 19, 2020

Step 3: Slide the Motor Housing through the hole of the spa basin. Slide the Universal Adapter (backside in) onto the Motor Housing, then hand tighten the Motor Cap Lock-Nut.

Important: please let it set for a period of 1/2 hours

1. Locking Ring (used to secure mounting housing to wall of spa basin)

Trench Mark is at the 12 o'clock position

Black line is at the 6 o'clock position

Step 4: Turn the motor clockwise until it lock into place. Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug.

Male


Female

Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug (Illustrated)

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES




ELITE Pedicure Chair


MODEL CODE | SKU : 100079

SALE


\$2,495.00

MSRP: \$3,495.00

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At \$1995 -6- Complete 5-piece Spa Package Starts At \$2495 FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (optional)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

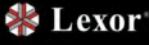
Jet Motor: 120VAC at 85W 60Hz
 Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
 Discharge Pump
 MOTOR: 120V AT 85W 60Hz
 MAX VERTICAL LIFT: 3 ft.
 FLOWRATE: 500 GPH At Floor Level
 Power Source: 115VAC, 60Hz, 15A
 (Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 🏠 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRIVÉ Lounge Pedicure Chair

PROMOTION


\$4,495.00

MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: **IVORY**



BASE COLOR: **BLACK MOONSTONE**

MODEL: **PRIVÉ Lounge Pedicure Chair**

QTY:

Order a complete 5-piece package with a matching n

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/private-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **71**
- HEIGHT (Upright/Reclined): **84**
- WIDTH (Trays Closed/Open): **34/49**
- Weight (lb.): **350**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000**

Lexor

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,999.00~~

From \$231/month with **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: DARK WALNUT


MODEL: ENVISION Pedicure Chair

QTY. - 1 +

ADD TO CART BUY IT NOW APPLY FOR FINANCING

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



lexor.com/products/envision-pedicure-chair?variant=41769101852838

FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

lexor.com/products/infinity-pedicure-chair?variant=41769152676006

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO

INFINITY Pedicure Chair

SALE
\$1,995.00
MSRP ~~\$2,795.00~~

From \$185/month with **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair


QTY. 1

Order a complete 5-piece package with a matching

ADD TO CART BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



lexor.com/products/Infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

53"/74" (Upright / Reclined) 31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774


BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**


 **Lexor®**


PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO

LIBERTÉ Pedicure Chair

SALE
\$2,395.00
~~MSRP: \$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL: LIBERTÉ Pedicure Chair ▾


QTY:

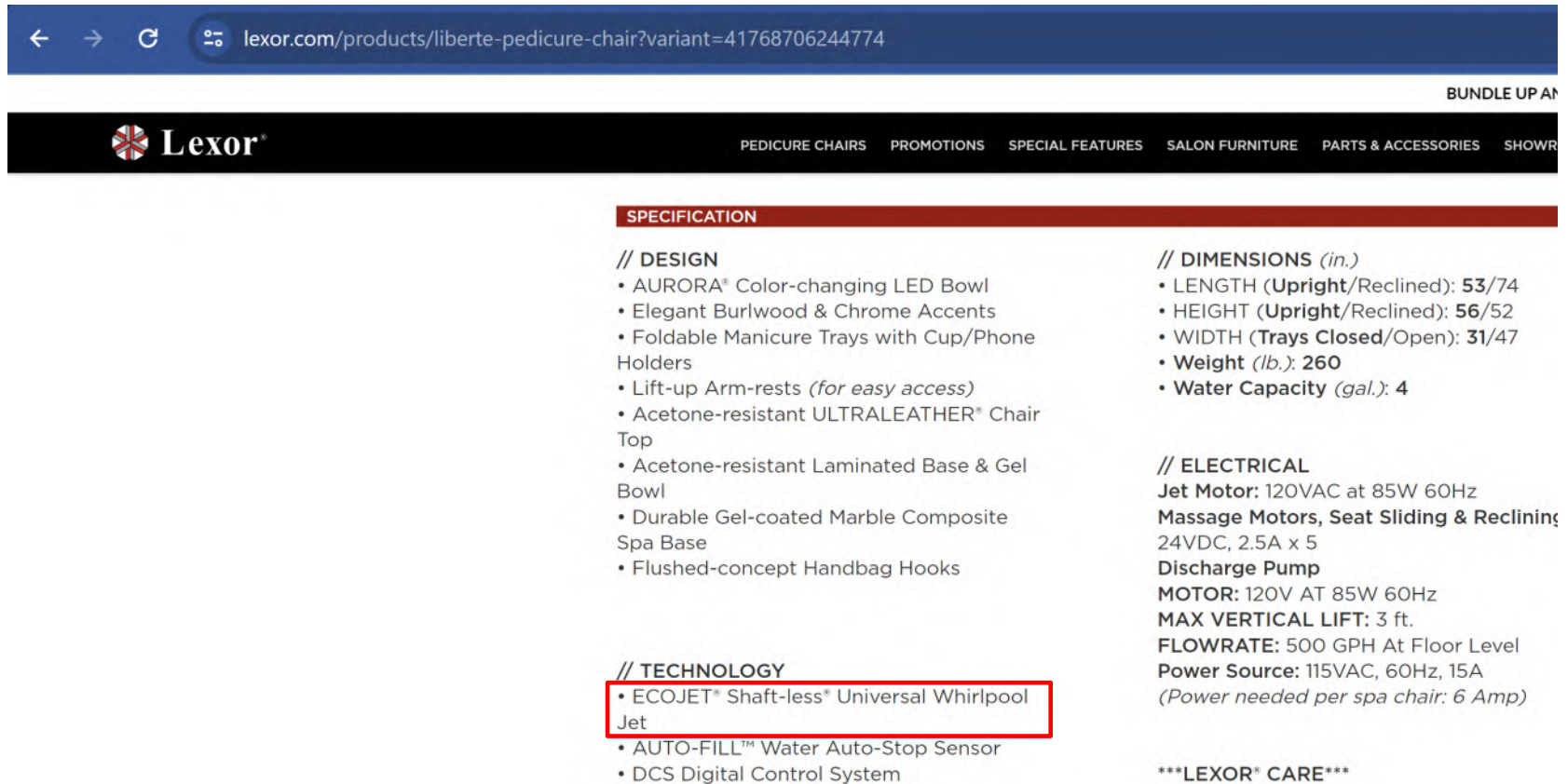
Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

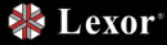
BUYER OUTSIDE OF NORTH AMERICA






← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

BUNDLE 1

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRESTIGE Pedicure Chair

SALE


\$2,495.00

MSRP: ~~\$3,000.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



PEDI-BOWL COLOR: WHITE PEARL

MODEL: PRESTIGE Pedicure Chair ▾

QTY.


ADD TO CART **BUY IT NOW**

SEE PROMOS


BUYER OUTSIDE OF NORTH AMERICA

← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As **1%** With Credit Key

 **Lexor®**

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



SPECIFICATION

// **DESIGN**

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// **TECHNOLOGY**

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// **DIMENSIONS (in.)**

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// **ELECTRICAL**

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

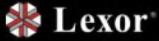
Power Source: 115VAC, 60Hz, 15A


(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

← → ↺ 📄 lexor.com/products/luminous-pedicure-chair?variant=41753030033574

BUNDLE

 [PEDICURE CHAIRS](#) [PROMOTIONS](#) [SPECIAL FEATURES](#) [SALON FURNITURE](#) [PARTS & ACCESSORIES](#) [SHOW](#)





LUMINOUS Pedicure Chair

SALE


\$2,195.00

MSRP: ~~\$2,995.00~~

From \$203/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL **LUMINOUS Pedicure Chair** ▾

QTY.

Order a complete 5-piece package with a matching

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/luminous-pedicure-chair?variant=41753030033574

JP AND SAVE! Smart Pedi-Spa Starting At \$1995 -&- Complete 5-piece Spa Package Starts At \$2495 FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

US 10,302,088 Claim Language	Evidence of Infringement EcoJet Universal 3.5 (Shafted)
43. A spa tub in manicure and pedicure industries comprising:	Lexor sells a plurality of spa tubs that accept both the shafted and shaftless models. The current spa tub models are able to accept the EcoJet Universal 3.5 models and are for sale at https://lexor.com/collections/spa-chair/Pedicure-Spa-Chair+Pedi-spa See Fig. 28-41.
a) a basin that is configured for mounting a magnetic coupling-type fluid pump; and	As shown in Fig. 28 Lexor pedicure spas feature a basin configured for mounting the Ecojet Universal Magnetic Jet.
b) said magnetic coupling-type fluid pump comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.
c) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted on said motor shaft,	As shown in Fig. 8(1) and 10(1-3) the Ecojet Universal Magnetic Jet comprises a motor, a motor shaft, and a magnetic plate mounted on the motor shaft.
d) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of said basin in the manicure and pedicure industries,	As shown in Figures 8(4-5 and 7) and 12(1) the mounting housing member comprises top surface, bottom surface, and a shoulder configured to mount to the wall of the basins of the Lexor pedicure spas.
e) a securing mechanism to secure said mounting housing member to said wall of said basin, and	As shown in Fig. 8(2-7) the mounting housing member comprises either a locking ring or wing nut to secure the mounting housing member to the wall of the basin.
f) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller comprising a magnetic plate, and a jet assembly housing,	As shown in Fig. 4, 11(5-7, and 9), 14(1 and 4), and 16(2-4) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller comprising a magnetic plate, and a jet assembly housing.

g) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, at least one inlet aperture, and at least one outlet aperture, wherein	As shown in Fig. 4, 7(3-4), 11(1-3, and 8-11), 13(6-7), and 18(1-2) the jet assembly housing comprises an inner surface, outer surface, a base, a front cover, an inlet aperture and an outlet aperture.
h) said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member,	As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while the motor assembly is secure to the bottom surface of the mounting housing member.
i) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 15(1-3) the bearing assembly comprises at least one bearing member.
j) wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,	As shown in Fig. 14(3-4 and 6-9) the bearing member is dimensioned and configured around the shaft member and rotated above a top surface of the base of the shaft protection member during operational use.
k) wherein said shaft assembly comprises said shaft member and said shaft protection member,	As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises a shaft member and the shaft protection member.
l) wherein said shaft member extends through said inner surface of said jet assembly housing.	As shown in Fig. 13(5) and 18(1-3) the shaft member extends through the inner surface of the jet assembly housing.
44. The spa tub according to claim 43, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 14(5) and 15(3) the outer bearing is made of plastic.
45. The spa tub according to claim 43, wherein at least a portion of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use.	As shown in Fig. 14(6) and 15(2) the inner bearing member manufactured of a rubber material (or rubber-like material) that is able to absorb vibration during operational use.

46. The spa tub according to claim 43, wherein, when in operational use, said shaft assembly is stationary.	As shown in Fig. 4, 11(5-7), and 14(1 and 3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operational use.
47. The spa tub according to claim 43, wherein said at least one bearing member is an outer bearing member and an inner bearing member.	As shown in Fig. 14(4-6) and 15(1-3) the bearing assembly comprises an outer bearing member and an inner bearing member.
48. The spa tub according to claim 43, wherein said base of said shaft protection member is a base having a central hole.	As shown in Fig. 14(2) and 17(2) the base of the shaft protection member is a base having a central hole.
49. The spa tub according to claim 43, wherein said base of said shaft protection member is manufactured of ceramic or a ceramic-type material.	As shown in Fig. 14(2) and 17(2) the base of the shaft protection member is manufactured of ceramic or ceramic-type material.
50. The spa tub according to claim 43, wherein said base of said shaft protection member is polished.	As shown in Fig. 14(2) and 17(2) the base of the shaft protection member is polished.
51. The spa tub according to claim 43, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3) and 17(1) the shaft member is manufactured of steel.
52. The spa tub according to claim 43, wherein said shaft assembly is secured about a center of an inner surface of said base of said jet assembly housing.	As shown in Fig. 11(5, 8, and 10) and 14(1) the shaft assembly is secured about the center of the inner surface of the base of the jet assembly housing.
53. The spa tub according to claim 43, wherein said shaft assembly and said bearing assembly align an axis of rotation of said magnetic impeller with an axis of rotation of the magnetic plate mounted on said motor.	As shown in Fig. 4, 8(1, 4, and 6), 10(1-3), 11(5-7), 19(4 and 7), and 20(4-5) the shaft assembly and bearing assembly align an axis of rotation of the magnetic impeller with an axis of rotation of the magnetic plate mounted on the motor.
54. The spa tub according to claim 43, wherein said mounting housing member further comprises a <u>gasket</u> .	As shown in Fig. 8(5) the mounting housing member comprises a gasket.
55. The spa tub according to claim 43, wherein said mounting housing member further comprises at least one mounting leg.	As shown in Fig. 8(3) the mounting housing member comprises at least one mounting leg.

56. The spa tub according to claim 55, wherein said securing mechanism is at least one wing nut, and wherein said at least one mounting leg is dimensioned and configured for receiving said at least one wing nut.	As shown in Fig. 8(2-7) the securing mechanism is at least one wing nut, and at least one mounting leg is dimensioned and configured for receiving at least one wing nut.
58. The spa tub according to claim 43, wherein said magnetic plate of said magnetic impeller is fully enclosed.	As shown in Fig. 16(2) the magnetic plate of the magnetic impeller is fully enclosed.
59. The spa tub according to claim 43, further comprising a rotation locking mechanism for preventing rotation of said jet assembly when said pump is in use or operation.	As shown in Fig. 12(1-5) the jet assembly includes a mechanism to prevent rotation of jet assembly when pump is in use or operation.
60. The spa tub according to claim 59, wherein said magnet plate of said magnetic impeller is fully enclosed.	As shown in Fig. 16(2) the magnetic plate of the magnetic impeller is fully enclosed.
61. The spa tub according to claim 43, wherein said mounting housing member further comprises a generally flat section that is at least 10% of said top surface for accommodating a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.	As shown in Fig. 10(4), 12(1), and 23-25 the mounting housing member comprises a flat section that is at least 10% of the top surface and accommodates a liner to be positioned between the base of the jet assembly housing and the top surface of the mounting housing member.
62. The spa tub according to claim 43, further comprises a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.	As shown in Fig. 23-25 Lexor sells separately a liner dimensioned and configured for being positioned between a bottom surface of said base of said jet assembly housing and said top surface of said mounting housing member.
63. The spa tub according to claim 47, wherein said outer bearing member is manufactured of a plastic material.	As shown in Fig. 14(5) and 15(3) the outer bearing is made of plastic.
64. The spa tub according to claim 47, wherein said inner bearing member is manufactured of a rubber material.	As shown in Fig. 14(6) and 15(2) the inner bearing is made of rubber.

<p>65. The spa tub according to claim 43, wherein said at least one inlet aperture forms an outer diameter, and wherein said outer diameter of said at least one inlet aperture is smaller than or equal to said outer diameter of said impeller.</p>	<p>As shown in Fig. 20(4 and 6) at least one inlet aperture forms an outer diameter, and the diameter is equal to or smaller than the outer diameter of the impeller.</p>
<p>66. The spa tub according to claim 43, wherein said at least one outlet aperture comprises a nozzle, wherein said nozzle and an axis of said fluid pump form an angle of less than 90 degrees.</p>	<p>As shown in Fig. 7(3), 9(2), 19(1) and 20(1) at least one outlet aperture comprises a nozzle, where the nozzle and the axis of the fluid pump form an angle of less than 90 degrees.</p>
<p>67. The spa tub according to claim 43, wherein said shaft assembly is secured to said base of said jet assembly housing.</p>	<p>As shown in Fig. 11(5 and 8) and 14(1) the shaft assembly is secured to the base of the jet assembly housing.</p>
<p>68. The spa tub according to claim 43, wherein said bearing assembly is secured to a center of said magnetic impeller.</p>	<p>As shown in Fig. 11(6-7), 14(4), and 16(3-4) the bearing assembly is secured to a center of the magnetic impeller.</p>

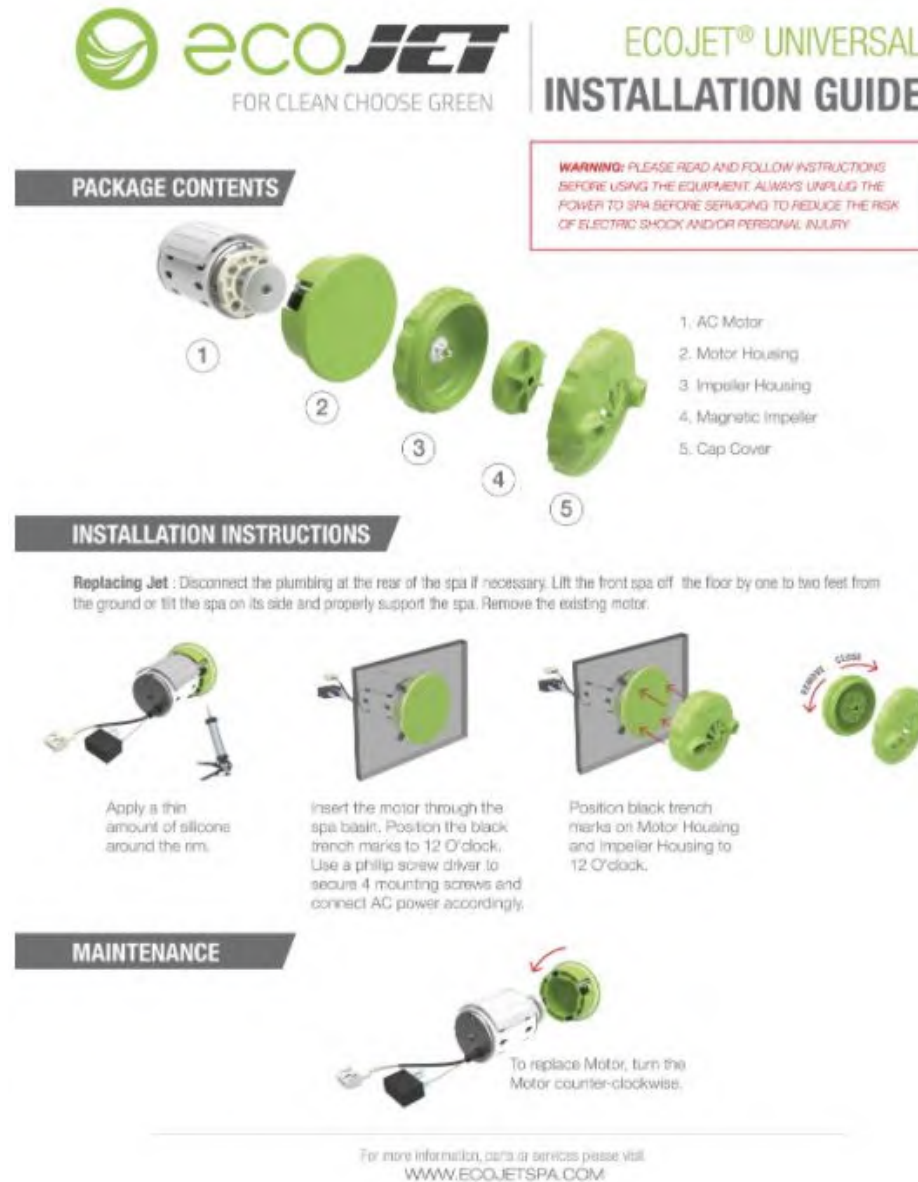
Figures for Ecojet Universal 3.50/
Second Model/Version
Shafted EcoJet II

Ecojet II magnetic drive jet
Option - wet cover & dry motor









lexor.com/product/ecojet-universal-jet-set-3-5-gray/

e... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search f

Contact Showrooms Financing Free Shipping on Spa Parts \$50+ | Call or Chat with us to place your order!

Lexor
THE KEY TO SALON SUCCESS.

Home Pedi-Spa Furniture Parts Promo Explore Ideas

YOUR CART \$0.00

ALL CATEGORIES Searching for ... All Categories (888) 479-6916

Home > Spa Parts > Plumbing Parts > EcoJet Universal Jet Set 3.5- Gray


EcoJet Universal Jet Set 3.5- Gray \$125.00

Availability: In Stock

- 1 +

ADD TO CART

SKU: ecojet-magnetic-drive-jet-kit
Categories: Plumbing Parts, Spa Parts



Description Additional information

Cropped on Oct 18, 2020



















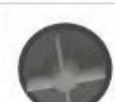















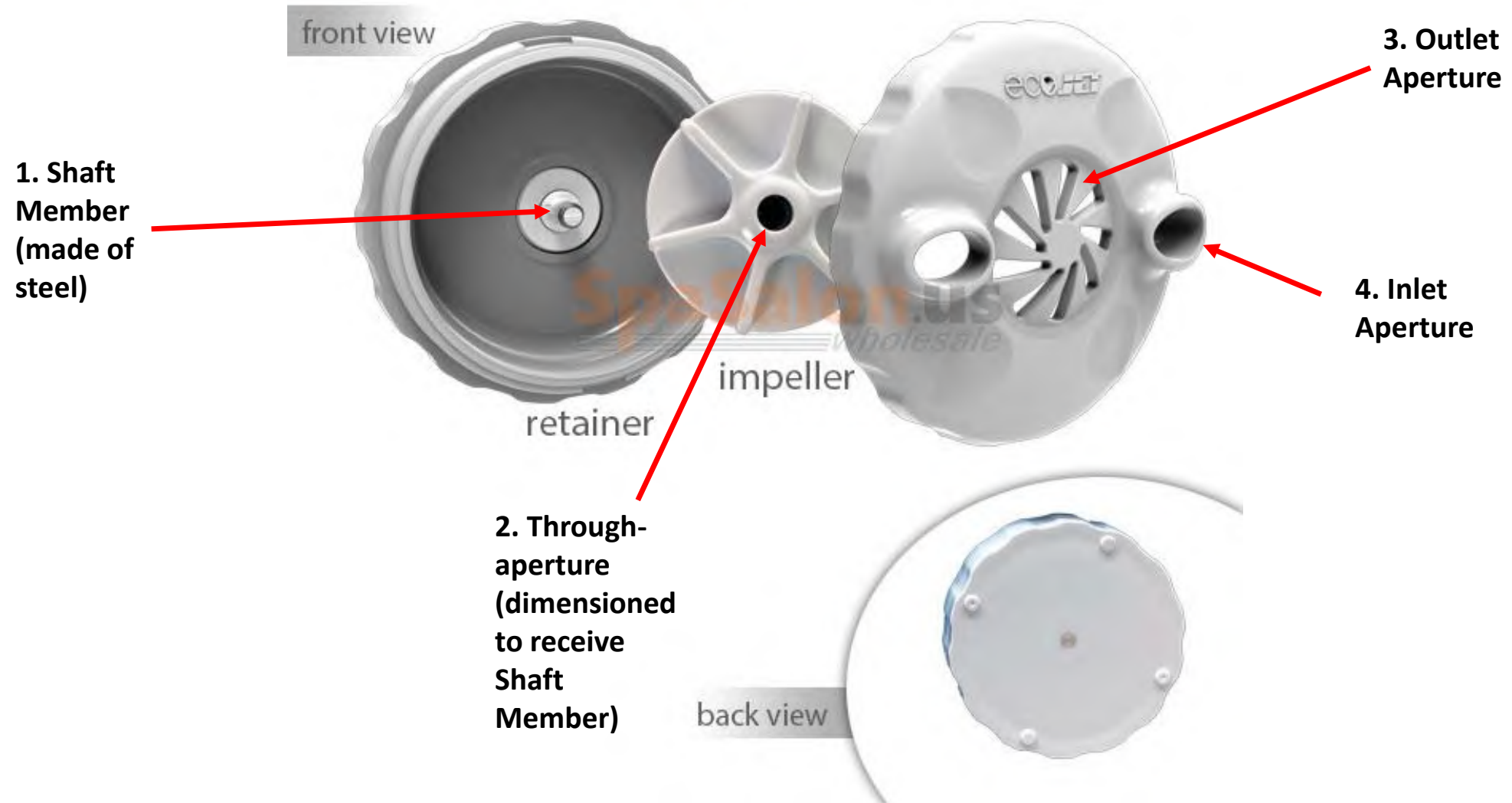
 For Clean Choose Green					
JET	MOTOR HOUSING		IMPELLER		COMPATIBILITY
ECOJET® UNIVERSAL Motor Housing & Wet-end has 4 locking dot-points.					
OTHER COMPATIBLE BRANDS Ecojet® Universal Wet-end can be replaced for other brands with 4 locking dot-points.					
OTHER JETS Ecojet® Universal Wet-end can not be used on these after market jets.					 • Replace with genuine Ecojet® Universal whole set.
					 • Replace with genuine Ecojet® Universal whole set.
		n/a			 • Replace with genuine Ecojet® Universal whole set.
					 • Replace with genuine Ecojet® Universal whole set.
ECOJET® 2017 Motor Housing & Wet-end has 3 locking dot-points.					

Image 2 of 2

ECO magnetic jet

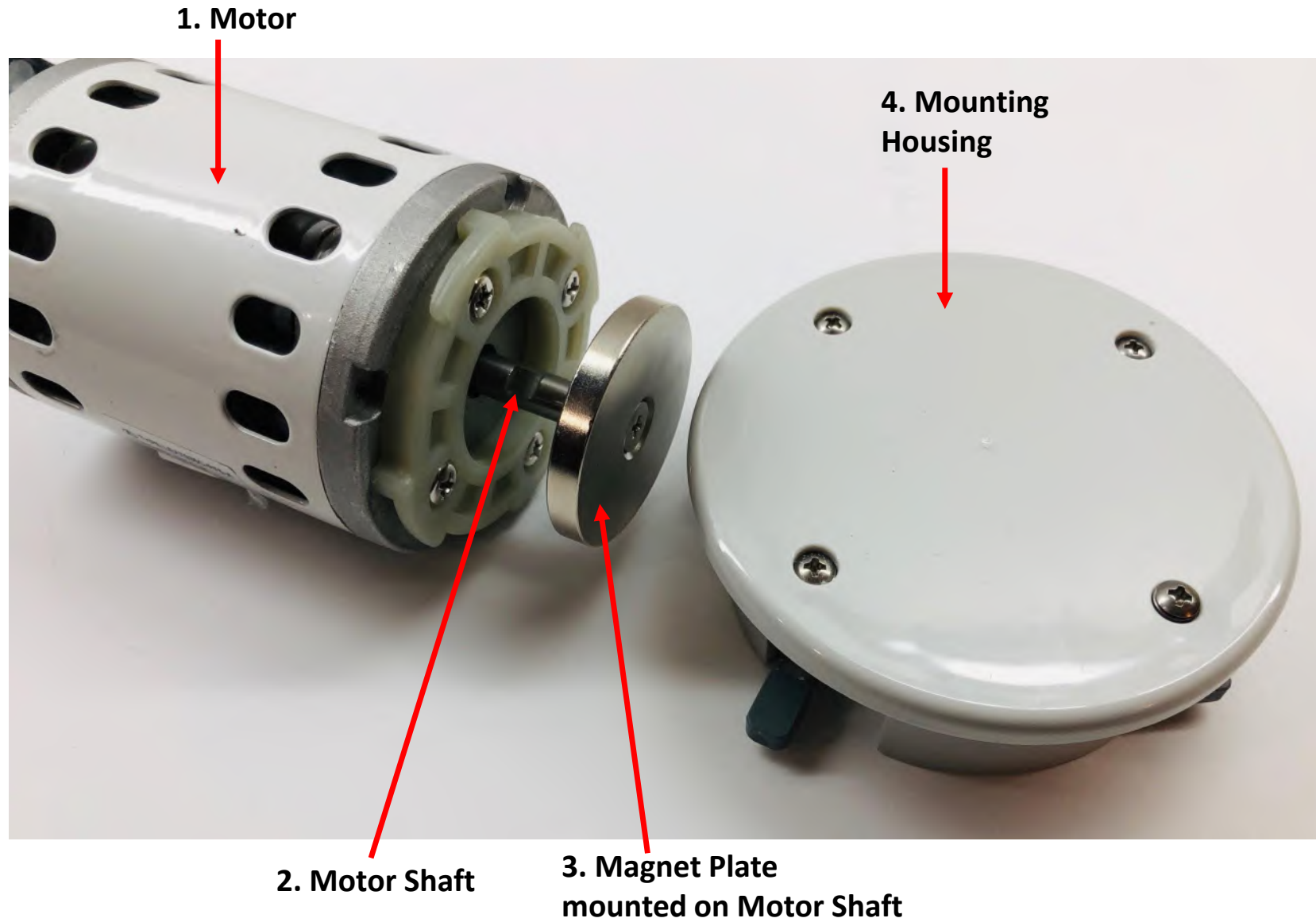
Option - new (cover + impeller + retainer)



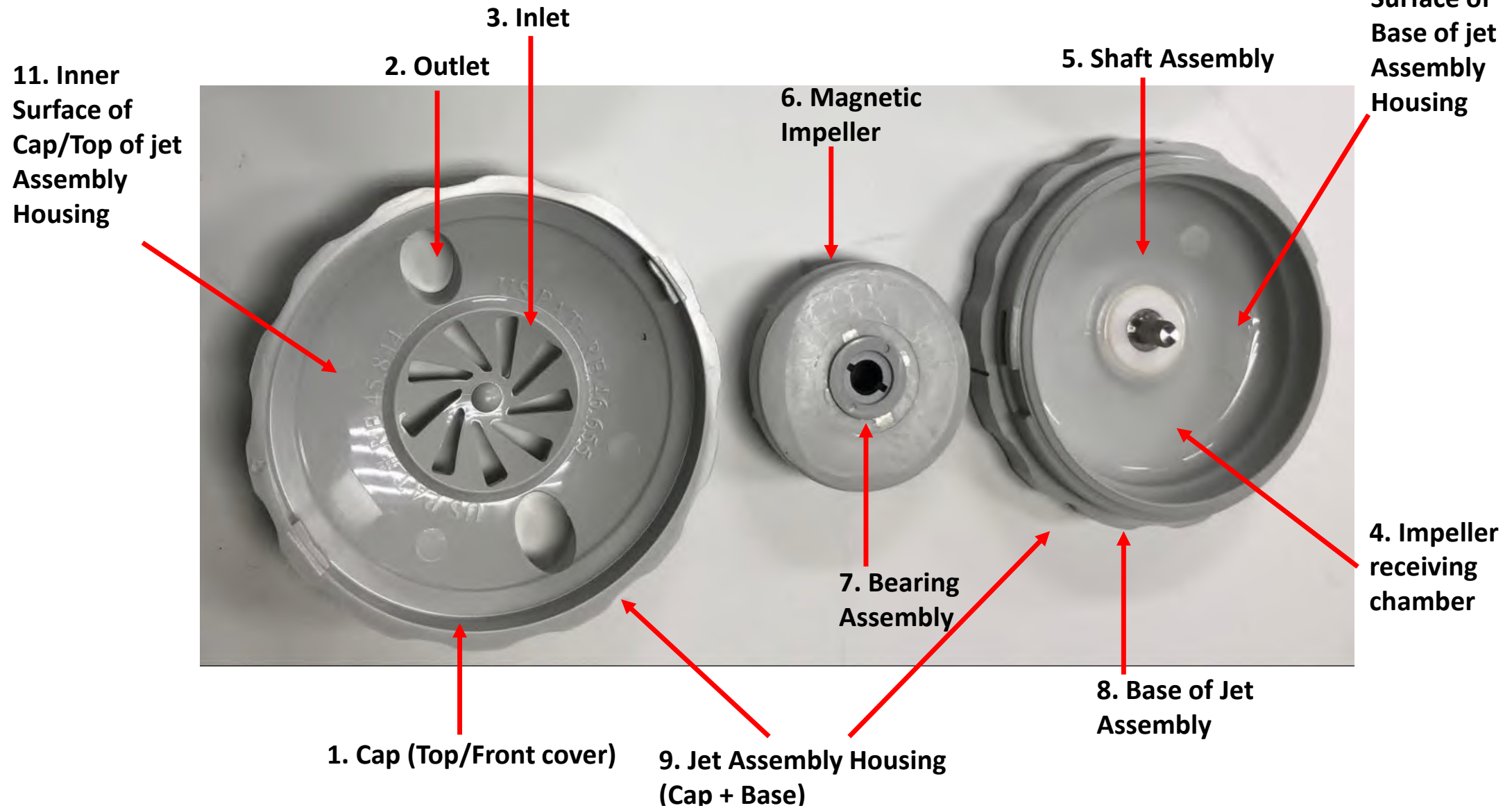


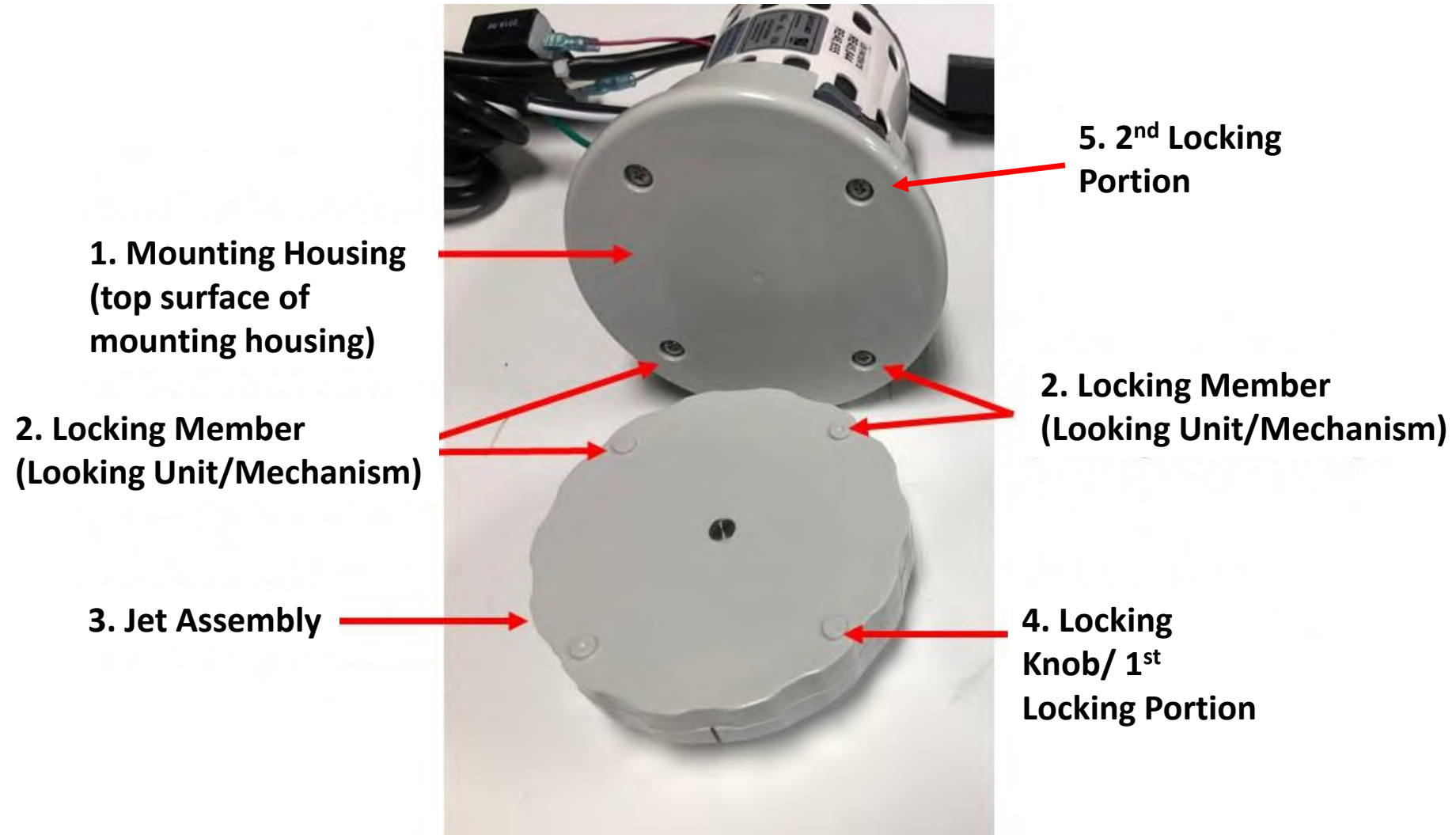
**1. Jet Assembly
(Wet-end)
(magnetically
coupled to top
surface of
Mounting
Housing)**





Jet Assembly





1. Jet Assembly

2. Inlet

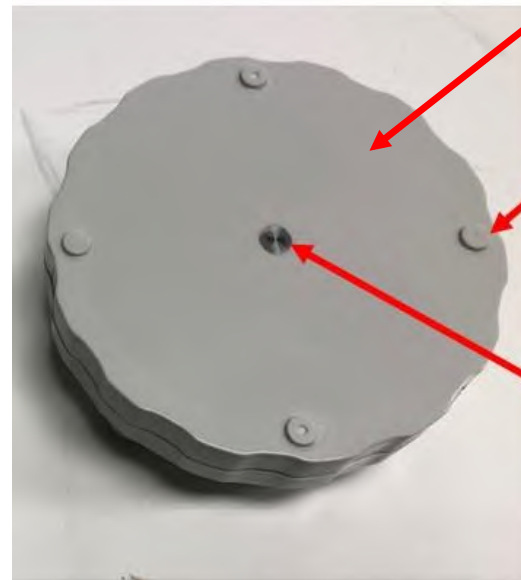
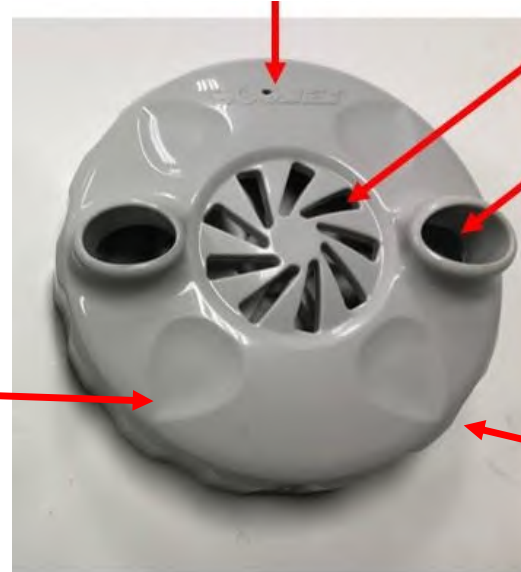
3. Outlet

**7. Outer Surface of
Cap/Top of jet
Assembly Housing**

**6. Outer Surface of Jet
Assembly Housing**

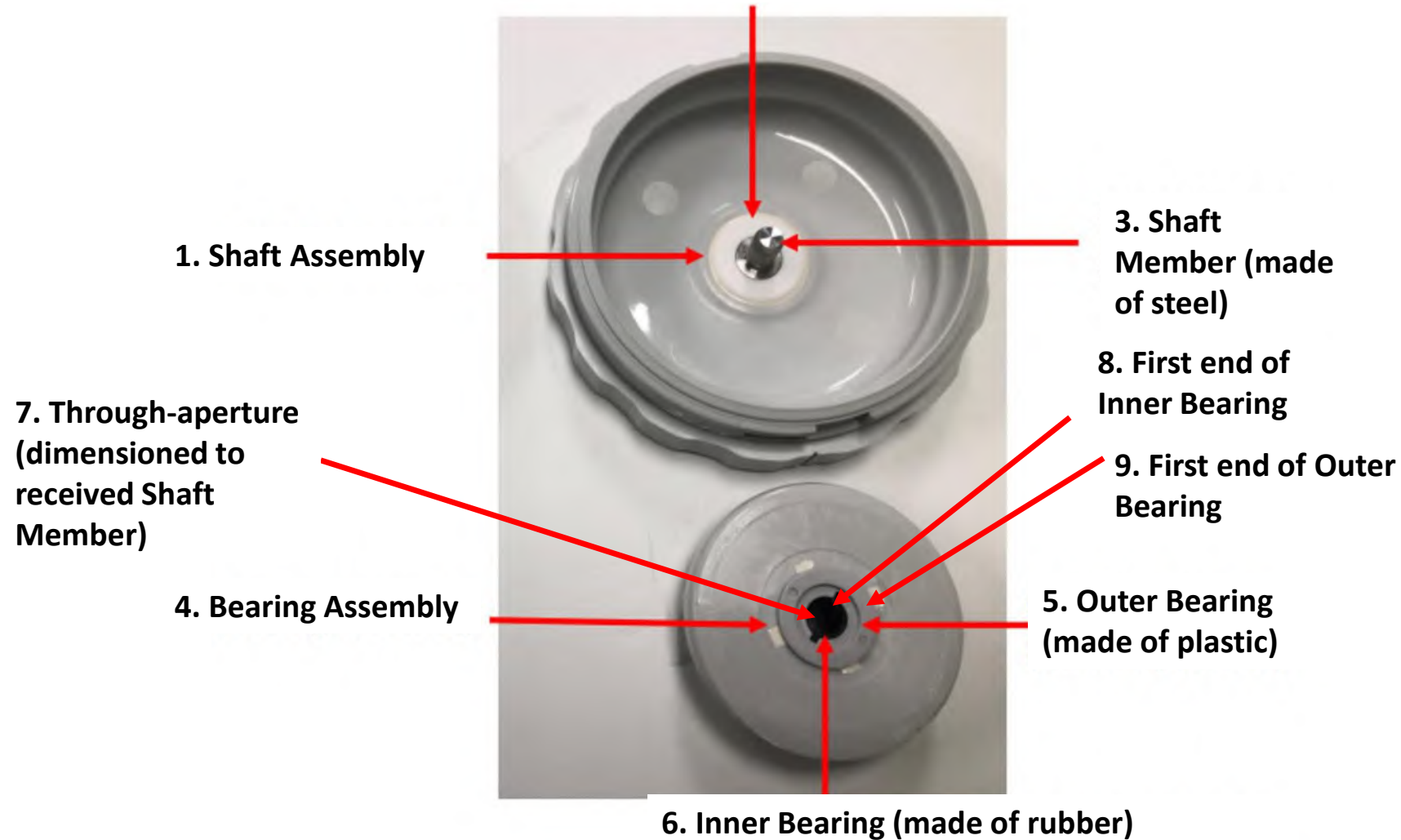
**4. Locking Knob
(locking mechanism)**

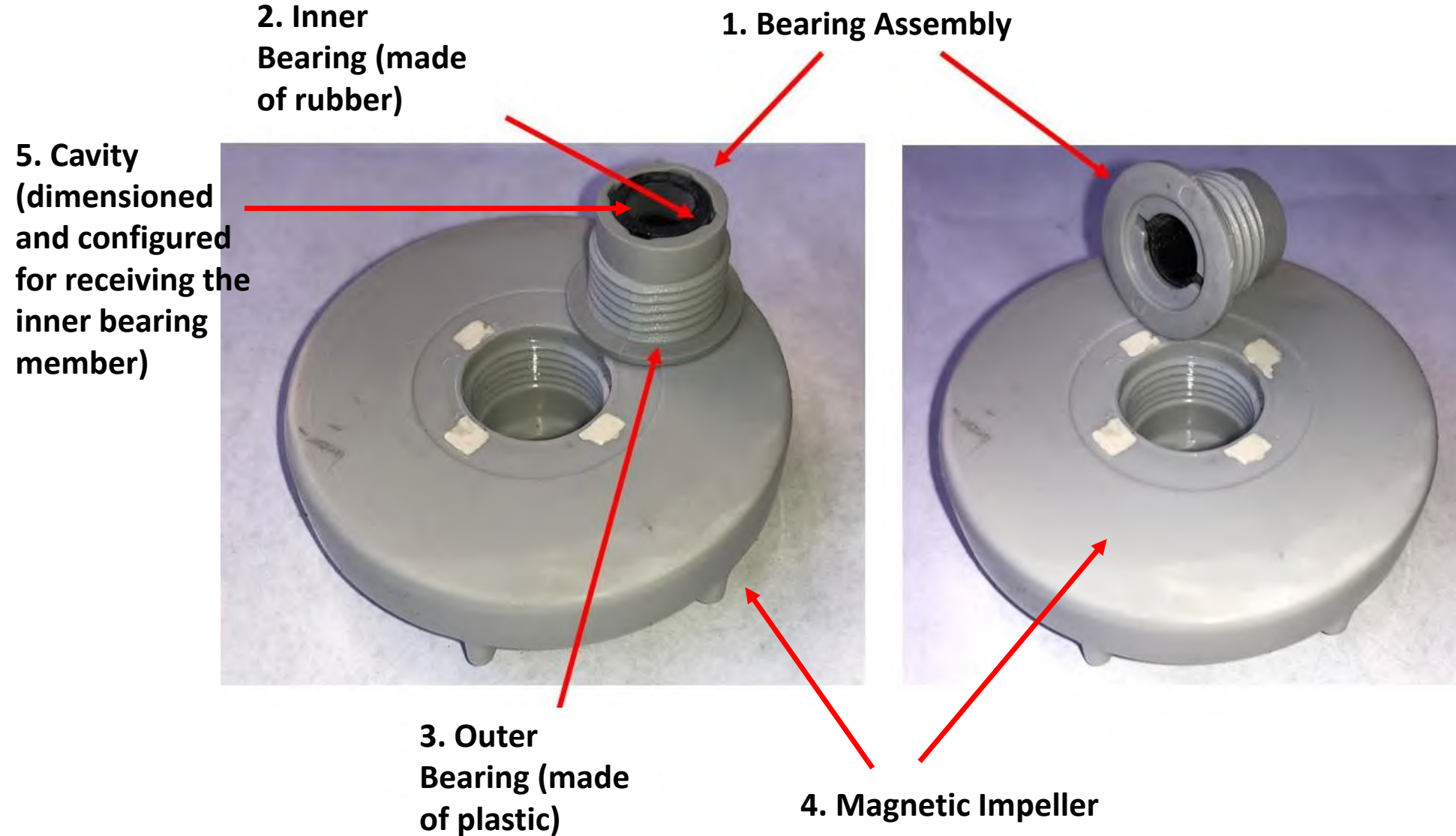
**5. Shaft Member
(extends though top
surface and bottom
surface of Base of Jet
Assembly)**



Shaft Assembly & Bearing Assembly

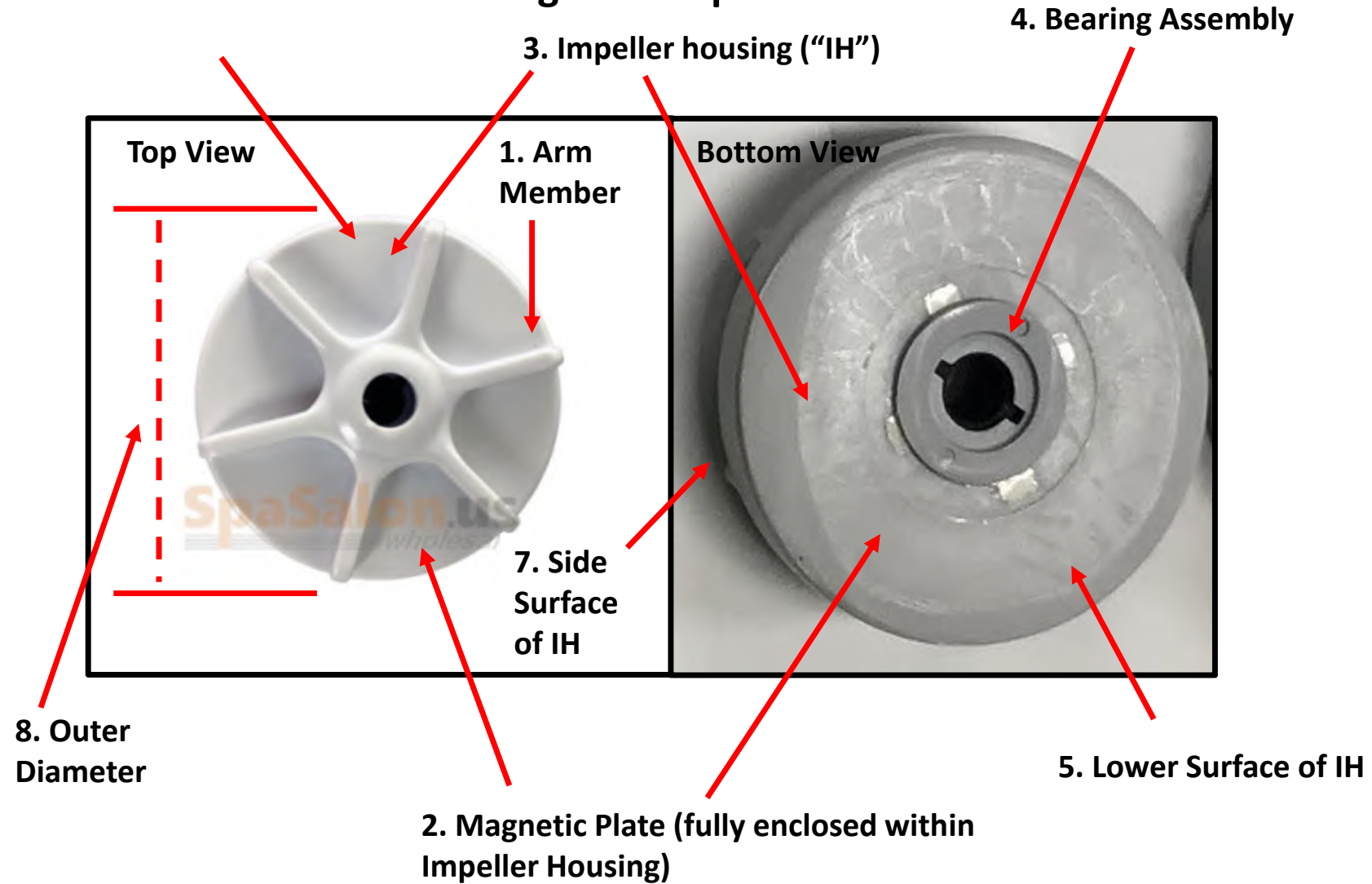
2. Shaft Protection Member
comprising of a base (made
of ceramic)

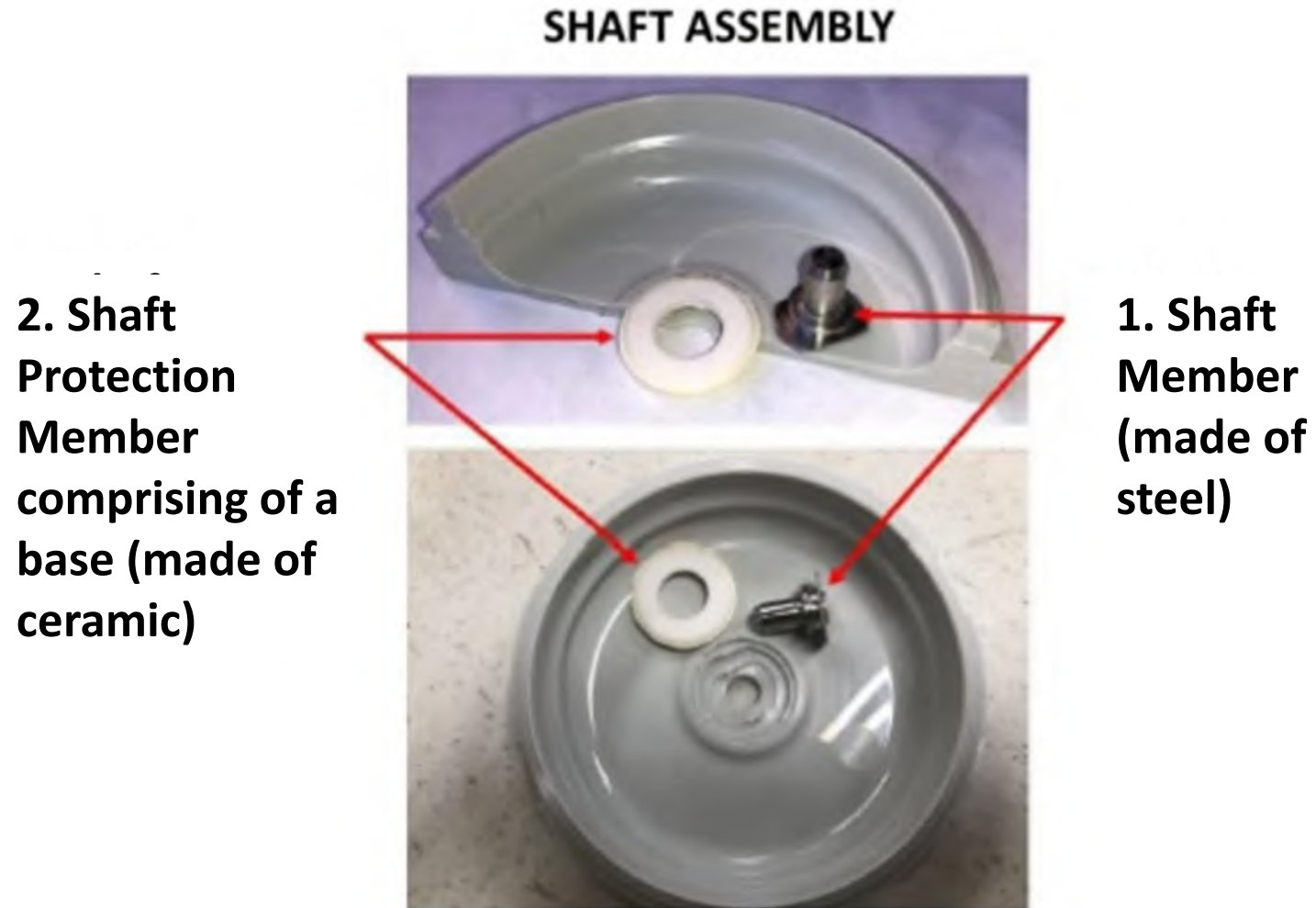




6. Upper Surface of IH

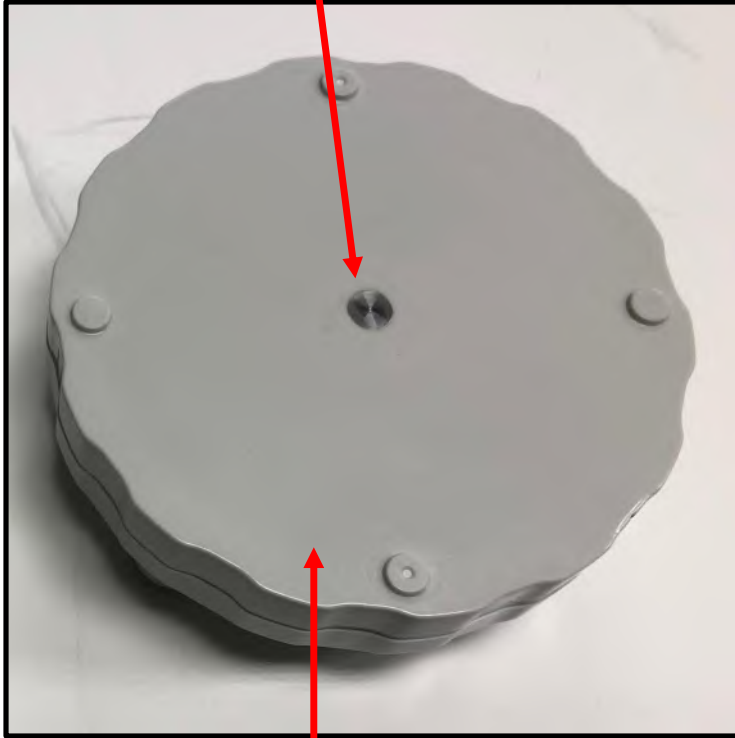
Magnetic Impeller





3. Shaft Member (extends though top surface and bottom surface of Base of Jet Assembly)

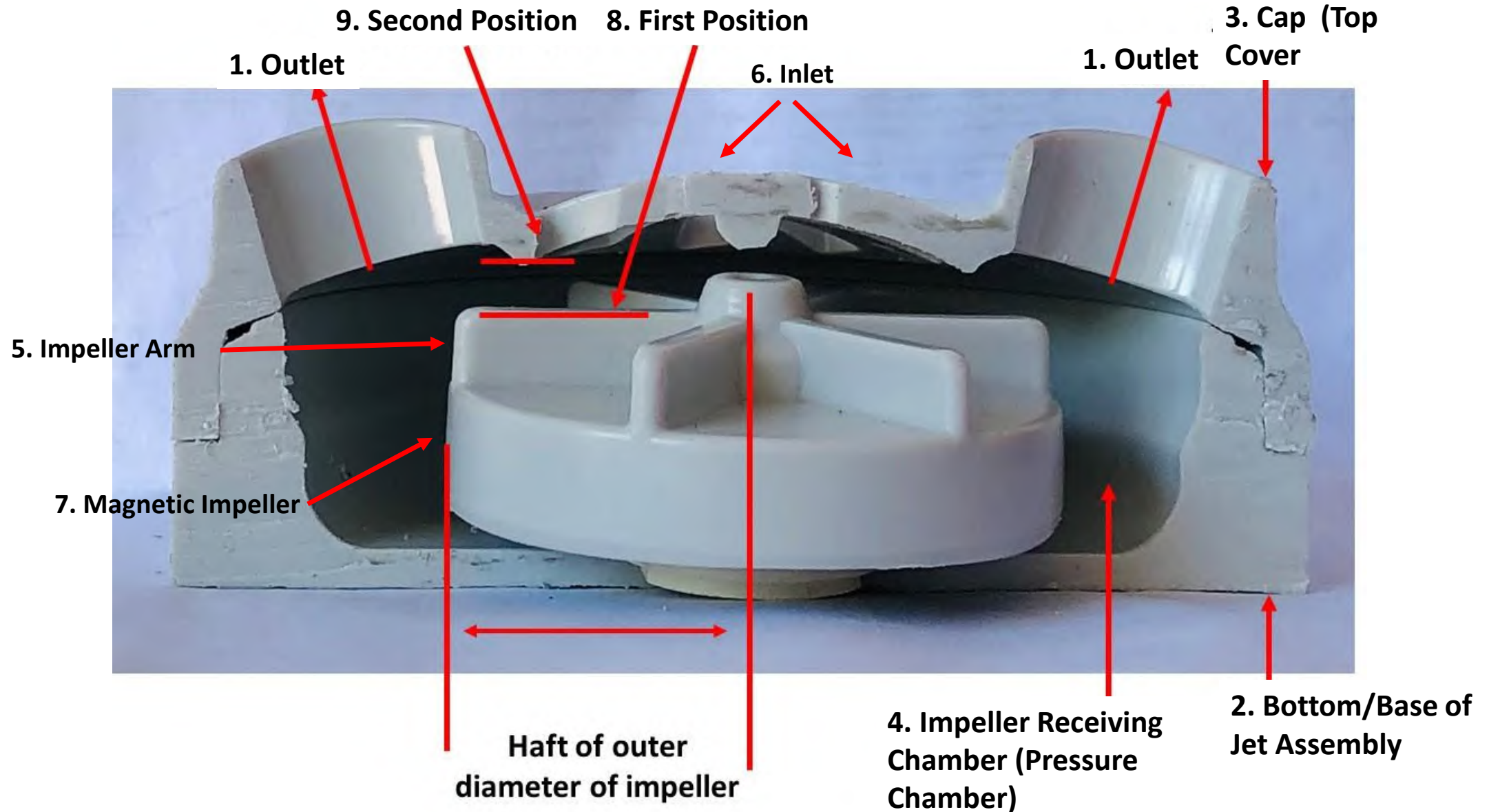
3. Shaft Member (made of steel)

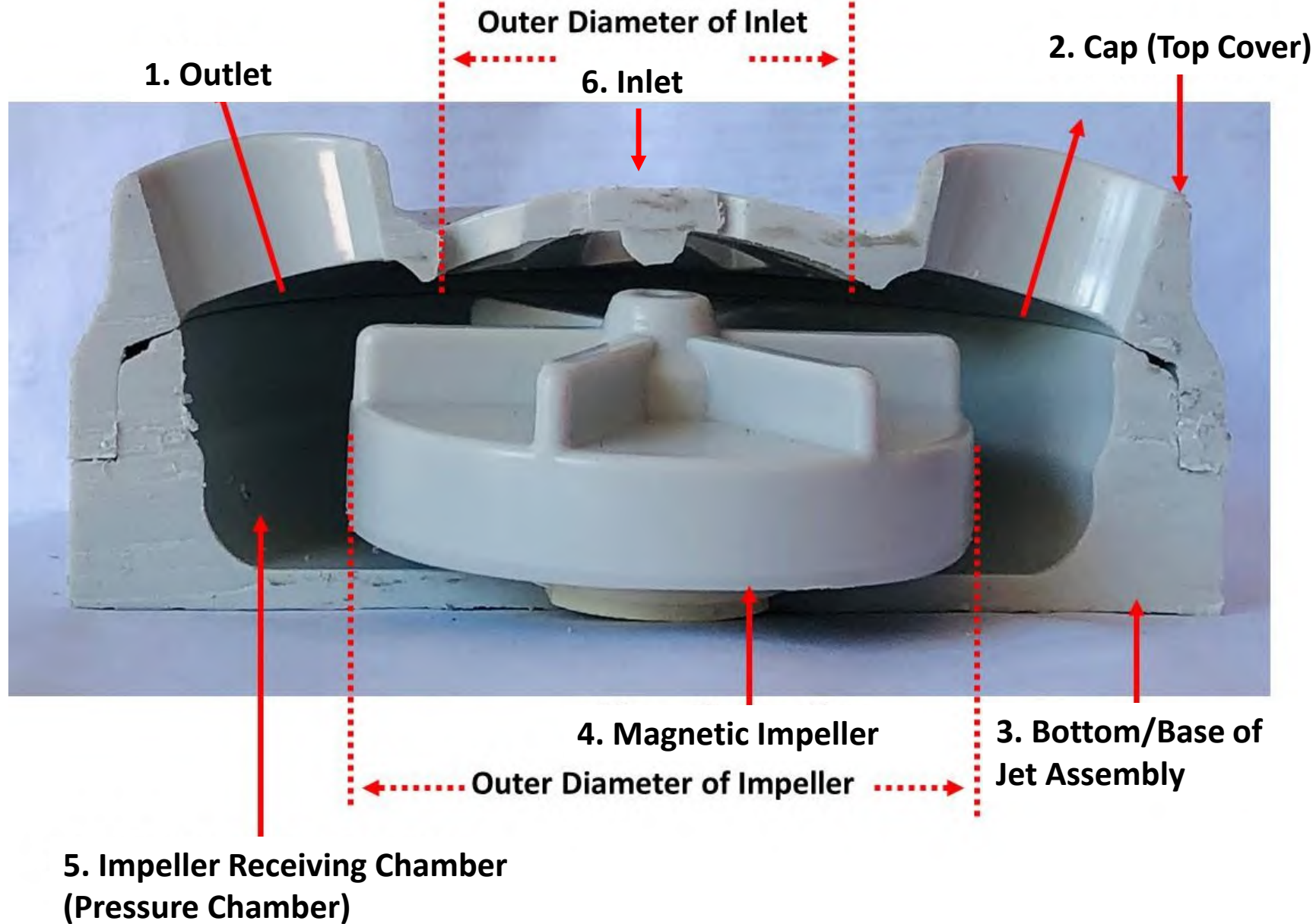


1. Outer surface of Base of Jet Assembly



2. Inner surface of Base of Jet Assembly





prospadepot.com/ecojet-magnetic-ii.html

Norred law Time Sh... Dashboard - MyCase

PSD™
Pedicure Spa & Salon Furniture Wholesaler

(714) 444-4144

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US FIND DEALERS



HOME / ACCESSORIES / WHIRLPOOL JET / ECOJET MAGNET DRIVE JET / ECOJET II MAGNETIC DRIVE

Product Code: Ecojet II Magnetic Drive

ECOJET II MAGNETIC DRIVE

Add to Wishlist | Add to Compare

f t i e + 1

DETAILS

Patented Ecojet II with Magnetic-Drive will provide a strong soothing whirlpool, easy to clean and extremely reliable. Use together with PSD Disposable Liner will bring sanitary pedicure service to a whole new level. The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized and Utilities Patented (3,272,079). This magnetic jet is assembled and tested in the U.S.A.

Retail box includes:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card

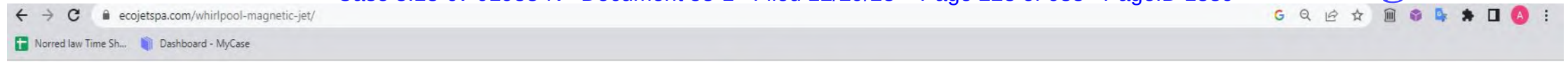
VIDEO

Ecojet Magnetic Drive Jet Commercial

Watch later | Share

Watch on YouTube | www.ecojetspa.com

RELATED PRODUCTS



HOME PRODUCTS CONTACT INFO FIND DEALERS SUPPORT

Universal Whirlpool Magnetic Jet System

(Designed for Pedicure Spa Chairs).

The Ecojet Magnetic Drive Jet takes "sanitary" to the next level. This jet system is highly efficient and reliable. With a one- year warranty, Ecojet U.L recognized, assembled & tested in the USA.

This kit is designed with advanced technology that increases the product longevity and durability. Our goal is to create the best performing whirlpool jet among competitors and most spa chairs in the market is now coming with universal fitment. The Ecojet Magnetic Drive Jet is now comes with universal fitment that fits most magnetic jets cutout for the Ecojet Universal Adapter is 3.5 inches. Any larger opening will have leakages (Please reference manual for further instructions).

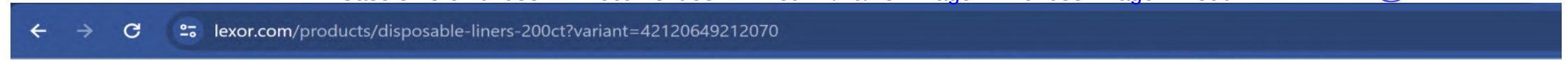
The Ecojet MD package Includes:

- Ecojet® MD Magnetic Motor
- Replacement Bushing Kit
- Motor Mounting Lever
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet® Cap Cover
- AC Power Cord



Home About Us Find Dealers Terms & Conditions

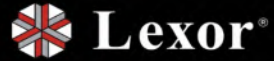
Get in touch with us →



age Starts At **\$2495**

FREE SHIPPING For All Orders Over **\$5000**

Financing Interest Rate As Low As **1%** With Credit Key



PEDICURE CHAIRS

PROMOTIONS

SPECIAL FEATURES

SALON FURNITURE

PARTS & ACCESSORIES

SHOWROOMS



Disposable Liners (200ct)

EcoJet

\$25.00

From \$2.31/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

ADD TO CART

BUY IT NOW


APPLY FOR FINANCING

SEE PROMOS

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.


← → ↻ ⓘ Not secure | lxsalons.com/product/liberte/

 **Lexor®**
THE KEY TO SALON SUCCESS.


Home Pedi-Spa Furniture Parts Promo Explore

Smart Features


SHARE



ECOJET™ Magnetic Drive
Distinctively designed to operate stronger, quieter and cooler to withstand long hours of usage in a typical nail salon, Ecojet is UL listed and backed with 2 U.S. utility patents giving you and your clients confidence in choosing a sanitary and efficient pedicure service.



ECOJET™ Disposable Liner
Your clients will appreciate the extra care taken to bring them a more sanitary experience from using disposable liners.

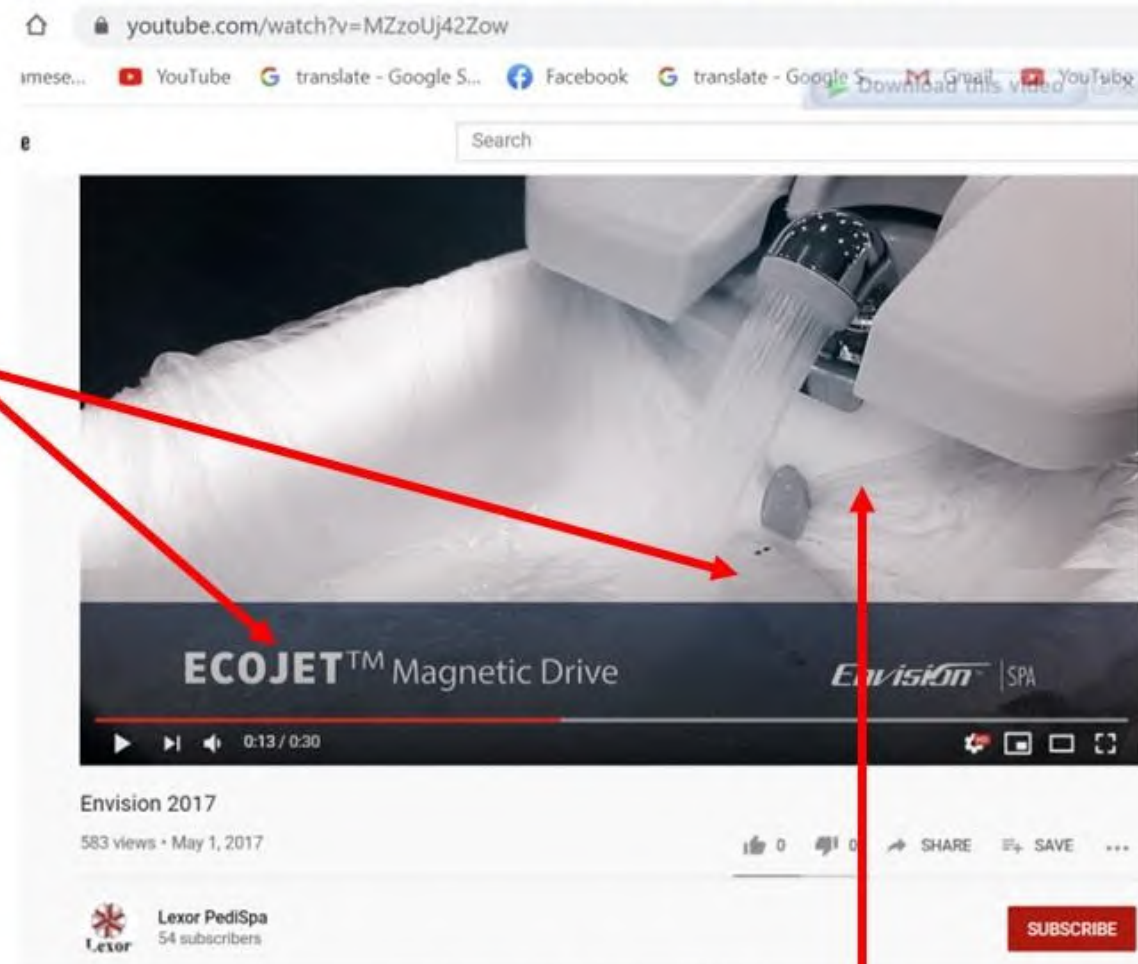


NEW EcoAir™ Ver
Easily attach your salt and nail stations with

Liner

<https://www.youtube.com/watch?v=MZzoUj42Zow> (Second 13 shows EcoJet)

EcoJet

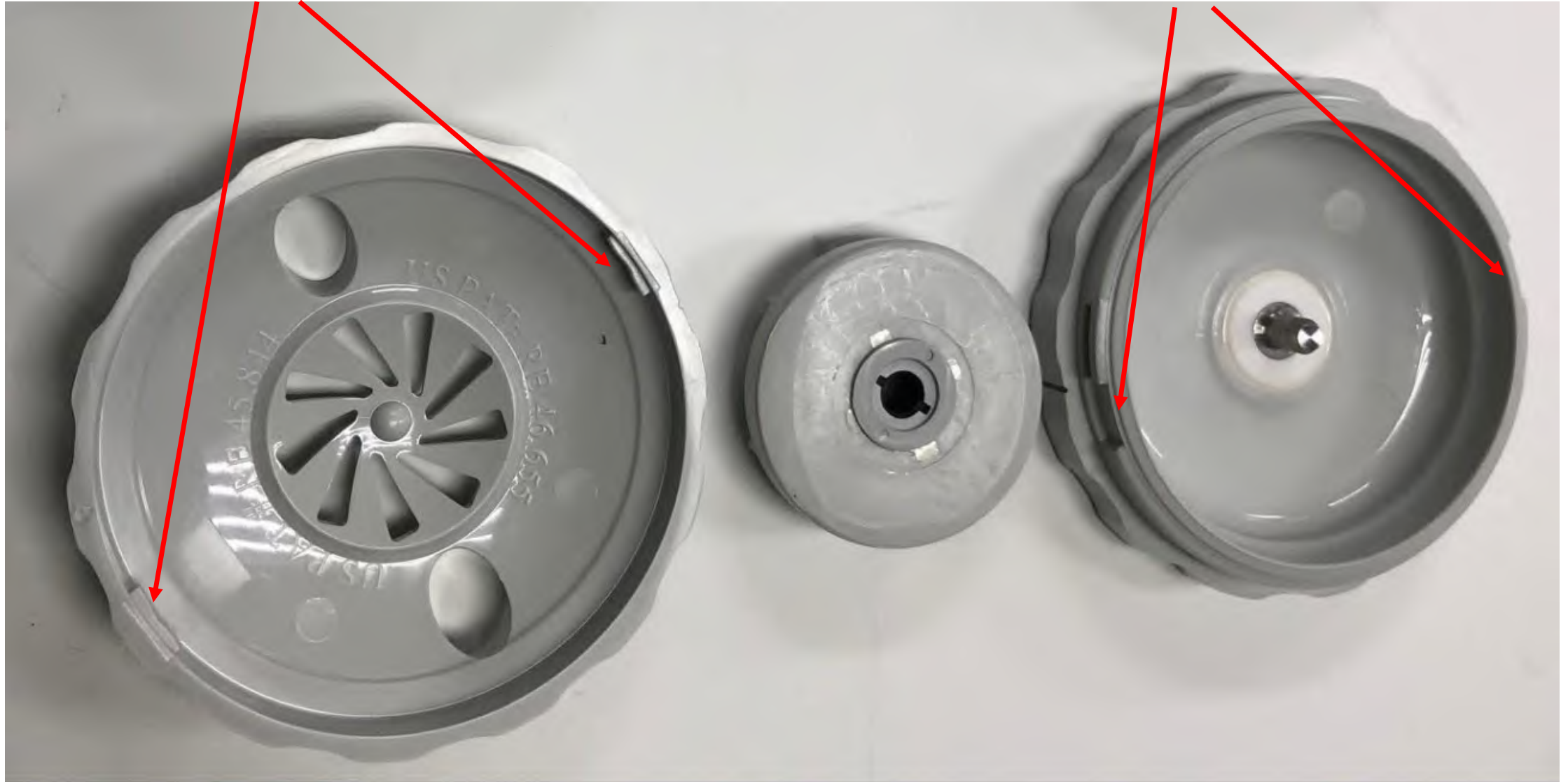


(Cropped on Oct 19, 2020)

Liner

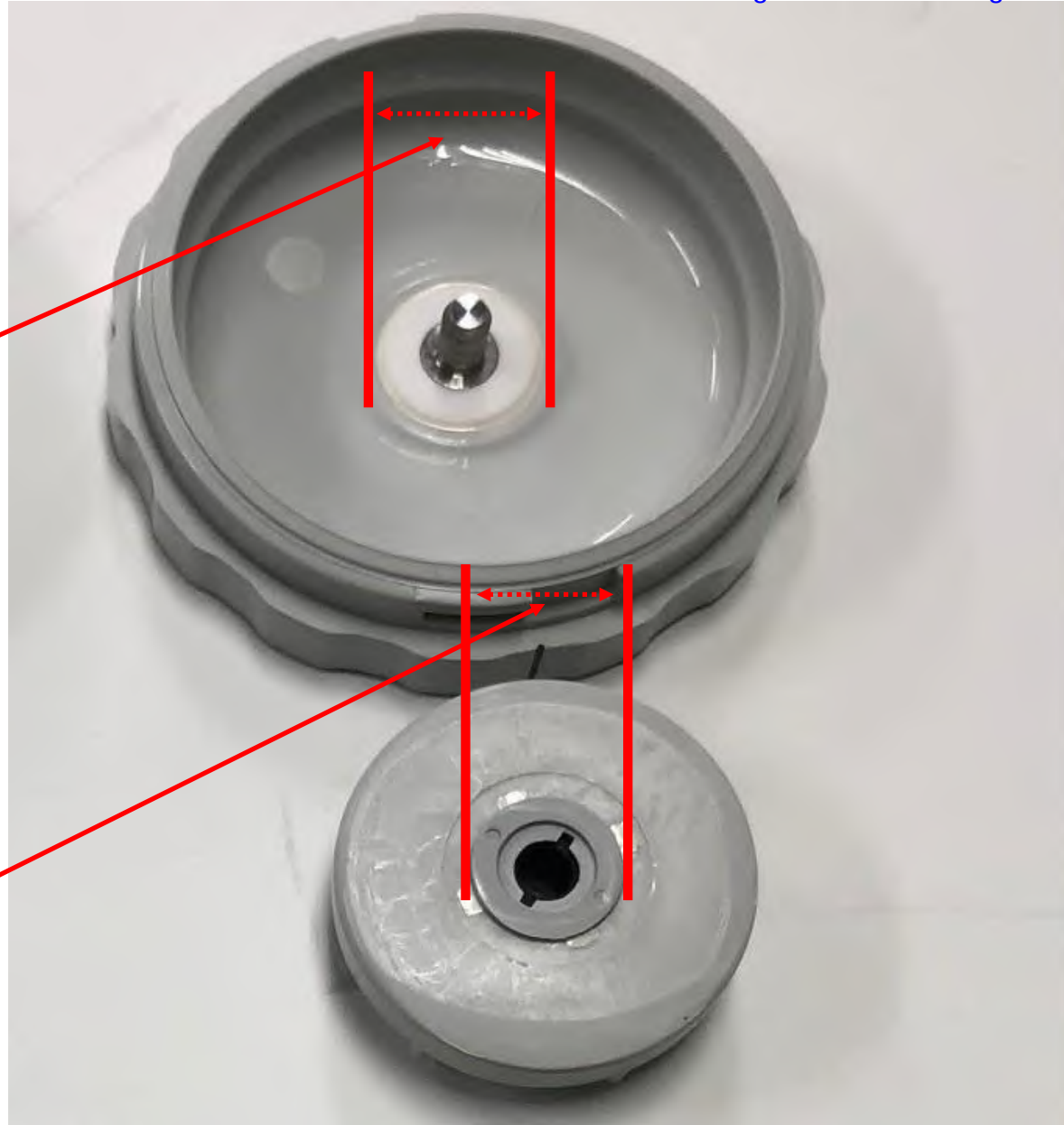
1. Engagement Member

1. Engagement Member



**1. Outer diameter
of Shaft Protection
Member**


**2. Outer diameter
of Outer Bearing
Member**



lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES




ELITE Pedicure Chair


MODEL CODE | SKU : 100079

SALE


\$2,495.00

MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (*for massage system & seat positioning*)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (*optional*)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

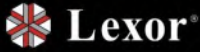
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 📄 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW




PRIVÉ Lounge Pedicure Chair


PROMOTION

\$4,495.00


MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: *IVORY*



BASE COLOR: *BLACK MOONSTONE*

MODEL **PRIVÉ Lounge Pedicure Chair** ▾

QTY.

Order a complete 5-piece package with a matching n

← → ↻ 📄 lexor.com/products/prive-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 71
- HEIGHT (Upright/Reclined): 84
- WIDTH (Trays Closed/Open): 34/49
- Weight (lb.): 350
- Water Capacity (gal.): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495**

FREE SHIPPING For All Orders Over **\$5000**



PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

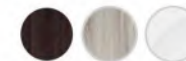
MSRP: ~~\$3,900.00~~

From \$231/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: DARK WALNUT

MODEL ENVISION Pedicure Chair

QTY. - 1 +

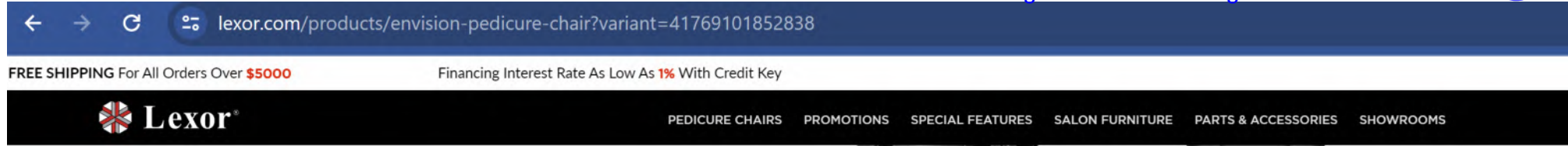
ADD TO CART

BUY IT NOW

APPLY FOR FINANCING

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

**SPECIFICATION**

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests *(for easy access)*
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

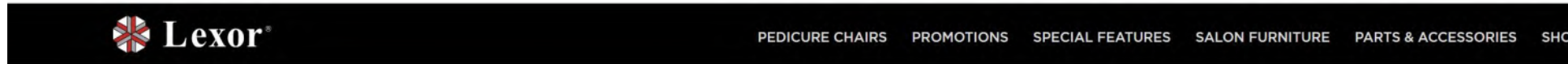
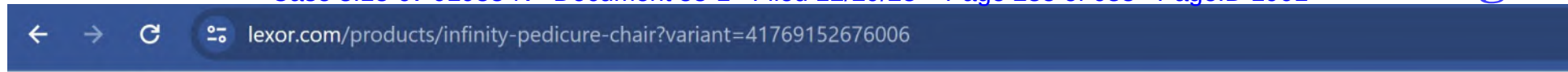
// DIMENSIONS *(in.)*

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight *(lb.)*: 260
- Water Capacity *(gal.)*: 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE



INFINITY Pedicure Chair

SALE

\$1,995.00

MSRP: ~~\$2,795.00~~

From \$185/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART

BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

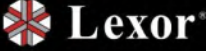
53"/74" (Upright / Reclined) 31"/47" (Trays Closed / Opened)

SPECIFICATION


<p>// DESIGN</p> <ul style="list-style-type: none">• AURORA® Color-changing LED Bowl• Elegant Burlwood & Chrome Accents• Foldable Manicure Trays with Cup/Phone Holders• Lift-up Arm-rests (for easy access)• Acetone-resistant ULTRALEATHER® Chair Top• Acetone-resistant Laminated Base & Gel Bowl• Durable Gel-coated Marble Composite Spa Base• Flushed-concept Handbag Hooks	<p>// DIMENSIONS (in.)</p> <ul style="list-style-type: none">• LENGTH (Upright/Reclined): 53/74• HEIGHT (Upright/Reclined): 56/52• WIDTH (Trays Closed/Open): 31/47• Weight (lb.): 260• Water Capacity (gal.): 4 <p>// ELECTRICAL</p> <p>Jet Motor: 120VAC at 85W 60Hz</p> <p>Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5</p> <p>Discharge Pump</p> <p>MOTOR: 120V AT 85W 60Hz</p> <p>MAX VERTICAL LIFT: 3 ft.</p> <p>FLOWRATE: 500 GPH At Floor Level</p> <p>Power Source: 115VAC, 60Hz, 15A</p> <p>(Power needed per spa chair: 6 Amp)</p>
<p>// TECHNOLOGY</p> <ul style="list-style-type: none">• ECOJET® Shaft-less® Universal Whirlpool Jet• AUTO-FILL™ Water Auto-Stop Sensor	

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**

 **Lexor®**

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO





LIBERTÉ Pedicure Chair


SALE

\$2,395.00

MSRP: ~~\$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL LIBERTÉ Pedicure Chair ▾

QTY. - 1 +

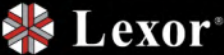
Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

[←](#) [→](#) [↺](#) [lexor.com/products/liberte-pedicure-chair?variant=41768706244774](#)



PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWR

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests *(for easy access)*
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS *(in.)*

- LENGTH (**Upright**/Reclined): **53/74**
- HEIGHT (**Upright**/Reclined): **56/52**
- WIDTH (**Trays Closed**/Open): **31/47**
- **Weight** *(lb.)*: **260**
- **Water Capacity** *(gal.)*: **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining

24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

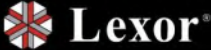
Power Source: 115VAC, 60Hz, 15A


(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

BUNDLE U

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRESTIGE Pedicure Chair

SALE


\$2,495.00

MSRP: ~~\$3,900.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



PEDI-BOWL COLOR: WHITE PEARL

MODEL PRESTIGE Pedicure Chair ▾

QTY. - 1 +

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

← → ↻ lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As 1% With Credit Key

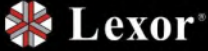
Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS


SPECIFICATION

<p>// DESIGN</p> <ul style="list-style-type: none"> • AURORA® Color-changing LED Bowl • Elegant Burlwood & Chrome Accents • Foldable Manicure Trays with Cup/Phone Holders • Lift-up Arm-rests <i>(for easy access)</i> • Acetone-resistant ULTRALEATHER® Chair Top • Acetone-resistant Laminated Base & Gel Bowl • Durable Gel-coated Marble Composite Spa Base • Flushed-concept Handbag Hooks <p>// TECHNOLOGY</p> <ul style="list-style-type: none"> • ECOJET® Shaft-less® Universal Whirlpool Jet • AUTO-FILL™ Water Auto-Stop Sensor • DCS Digital Control System 	<p>// DIMENSIONS (in.)</p> <ul style="list-style-type: none"> • LENGTH (Upright/Reclined): 53/74 • HEIGHT (Upright/Reclined): 56/52 • WIDTH (Trays Closed/Open): 31/47 • Weight (lb.): 260 • Water Capacity (gal.): 4 <p>// ELECTRICAL</p> <p>Jet Motor: 120VAC at 85W 60Hz</p> <p>Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5</p> <p>Discharge Pump</p> <p>MOTOR: 120V AT 85W 60Hz</p> <p>MAX VERTICAL LIFT: 3 ft.</p> <p>FLOWRATE: 500 GPH At Floor Level</p> <p>Power Source: 115VAC, 60Hz, 15A <i>(Power needed per spa chair: 6 Amp)</i></p> <p>***LEXOR® CARE***</p>
--	---

← → ↺ 📄 lexor.com/products/luminous-pedicure-chair?variant=41753030033574


BUNDLE


 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO




LUMINOUS Pedicure Chair

SALE
\$2,195.00
MSRP: ~~\$2,995.00~~

From \$203/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL

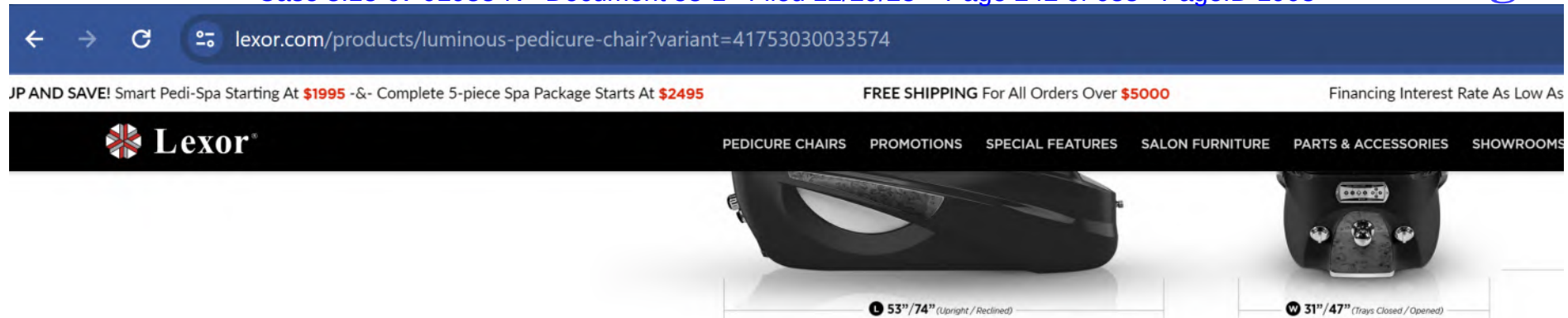
QTY.

Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (*for massage system & seat positioning*)
- 4-way Powered Chair Top

// DIMENSIONS (*in.*)

- LENGTH (**Upright/Reclined**): 53/74
- HEIGHT (**Upright/Reclined**): 56/52
- WIDTH (**Trays Closed/Open**): 31/47
- Weight (*lb.*): 260
- Water Capacity (*gal.*): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

(12) **United States Patent**
Le et al.

(10) **Patent No.:** **US 10,215,177 B2**
(45) **Date of Patent:** **Feb. 26, 2019**

(54) **FLUID PUMP FOR DISPENSING A FLUID TO A SETTING OR WORK ENVIRONMENT**

(71) Applicants: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US)

(72) Inventors: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US)

(73) Assignee: **Luraco, Inc.**, Arlington, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/833,569**

(22) Filed: **Dec. 6, 2017**

(65) **Prior Publication Data**

US 2018/0094632 A1 Apr. 5, 2018

Related U.S. Application Data

(63) Continuation of application No. 15/237,595, filed on Aug. 15, 2016, and a continuation-in-part of (Continued)

(51) **Int. Cl.**
F04D 13/02 (2006.01)
F04D 13/06 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC **F04D 13/024** (2013.01); **F04D 13/026** (2013.01); **F04D 13/0633** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC **F04D 13/026**; **F04D 13/024**; **F04D 29/628**;
F04D 29/669; **F04D 29/086**;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,506,886 A 5/1950 Okulitch et al.
2,951,689 A 9/1960 Asp et al.
(Continued)

FOREIGN PATENT DOCUMENTS

CA 1286755 C 7/1991
CN 203396450 U 1/2014
(Continued)

OTHER PUBLICATIONS

ANS Gspa F Pedicure Spa (<http://buynailsdirect.com/nails-salon-pedicure-spas/glass-sink-spas/ans-gspa-f-pedicure-spa.html>), Aug. 15, 2016.

(Continued)

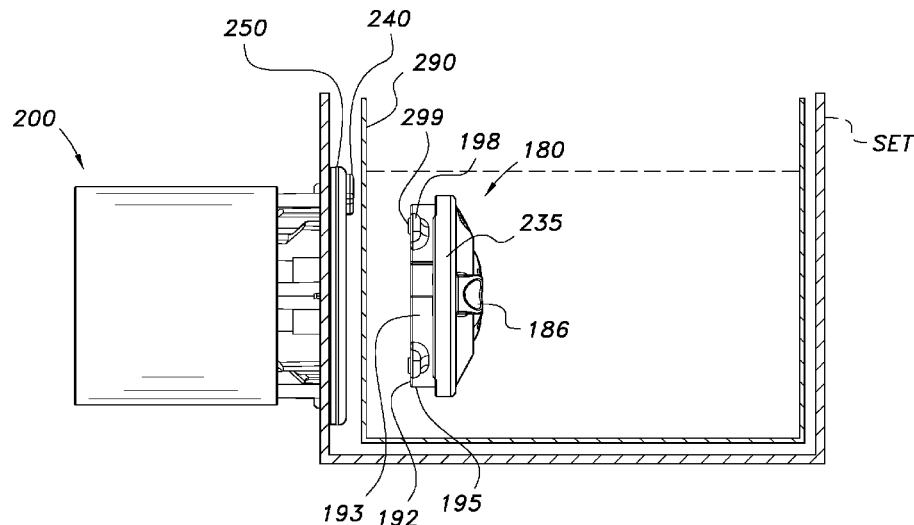
Primary Examiner — Nathan C Zollinger

(74) *Attorney, Agent, or Firm* — Hoang Steve Ngo, Esq.

(57) **ABSTRACT**

A fluid pump for dispensing a fluid to a setting or work environment is disclosed. A fluid pump having a contactless, fluid sensor and for use with a liner is also disclosed. The pump includes a jet assembly, a motor assembly, and a contactless, fluid sensor. The pump may further include a mounting housing member, a gasket or seal, and a liner when a liner is not already present. The jet assembly is coupled to or secured about the motor assembly. The jet assembly includes a jet assembly housing, and preferably also includes a printed circuit board (PCB), a PCB cover, a shaft assembly, and an impeller. The jet assembly housing includes a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture. A pump apparatus that includes a pump as described, a power source, and/or a control apparatus is further disclosed.

30 Claims, 21 Drawing Sheets



US 10,215,177 B2

Page 2

Related U.S. Application Data

application No. 13/923,364, filed on Jun. 20, 2013,
now Pat. No. 9,926,933.

(51) Int. Cl.

F04D 25/02 (2006.01)
F04D 29/046 (2006.01)
F04D 29/047 (2006.01)
F21V 19/00 (2006.01)
F21Y 115/10 (2016.01)

(52) U.S. Cl.

CPC **F04D 25/026** (2013.01); **F04D 29/047**
(2013.01); **F04D 29/0465** (2013.01); **F04D**
13/064 (2013.01); **F05B 2240/14** (2013.01);
F05B 2240/50 (2013.01); **F21V 19/003**
(2013.01); **F21Y 2115/10** (2016.08)

(58) Field of Classification Search

CPC F04D 29/047; F04D 29/4293; F04D
29/0465; F04D 29/046; F04D 15/0218;
F05B 2240/14; F05B 2240/50; F21Y
2115/10; F21V 19/003

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

2,958,517 A 11/1960 Harker et al.
3,089,514 A 5/1963 Sudmeier
3,198,125 A 8/1965 Yuza et al.
3,299,819 A 1/1967 McCoy
3,411,450 A * 11/1968 Clifton F04D 13/024
310/104
3,572,651 A 3/1971 Harker
3,630,645 A * 12/1971 Eheim H02K 5/1282
285/331
3,932,068 A 1/1976 Zimmermann
3,941,517 A 3/1976 Miyahara
4,082,380 A 4/1978 Klaus et al.
4,115,040 A 9/1978 Knorr
4,135,863 A 1/1979 Davis et al.
4,226,574 A 10/1980 Villette
4,304,532 A 12/1981 McCoy
4,312,752 A 1/1982 Malik
4,331,496 A 5/1982 Orndorff, Jr. et al.
4,513,735 A 4/1985 Friedson et al.
4,523,580 A 6/1985 Tureaud
4,569,337 A 2/1986 Baumann et al.
4,606,698 A 8/1986 Clausen et al.
4,716,605 A 1/1988 Shepherd et al.
4,875,497 A 10/1989 Worthington
4,982,606 A 1/1991 Adamski et al.
5,145,323 A 9/1992 Farr
5,238,369 A 8/1993 Farr
5,245,221 A 9/1993 Schmidt et al.
5,458,459 A * 10/1995 Hubbard F04D 29/0413
415/206
5,587,023 A 12/1996 Booth
5,980,112 A 11/1999 Matthews
5,992,447 A 11/1999 Miller et al.
6,732,387 B1 5/2004 Waldron
7,168,107 B2 1/2007 Gruenwald
7,393,188 B2 7/2008 Lawyer et al.
7,432,725 B2 10/2008 Sieh et al.

7,440,820 B2 10/2008 Gougerot et al.
7,593,789 B2 9/2009 Gougerot et al.
8,214,937 B2 7/2012 Lawyer et al.
8,296,874 B2 10/2012 Galati, Jr. et al.
8,380,355 B2 2/2013 Mayleben
8,531,048 B2 9/2013 Tran et al.
8,657,583 B2 2/2014 Ward
8,662,848 B2 * 3/2014 Tran F04D 29/048
416/183
8,936,444 B2 1/2015 Drechsel et al.
9,220,657 B2 12/2015 Stauber et al.
9,450,475 B2 9/2016 Zumstein
9,551,343 B2 1/2017 Marks et al.
9,572,747 B2 2/2017 Tran et al.
2005/0045621 A1 3/2005 Chenier et al.
2006/0096021 A1 5/2006 Hutchings
2007/0101489 A1 5/2007 Hutchings
2008/0035427 A1 2/2008 Fowler
2008/0229819 A1 9/2008 Mayleben et al.
2009/0064406 A1 3/2009 Lawyer et al.
2009/0094736 A1 4/2009 Booth et al.
2010/0074777 A1 3/2010 Laufer et al.
2010/0239435 A1 9/2010 Le et al.
2011/0004994 A1 1/2011 Le et al.
2011/0116948 A1 5/2011 Yi et al.
2011/0211982 A1 * 9/2011 Marks A01K 63/047
417/420
2011/0223047 A1 * 9/2011 Tran F04D 5/002
417/420
2011/0253236 A1 * 10/2011 Le F04F 5/10
137/565.22
2011/0305562 A1 12/2011 Matsunaga et al.
2012/0156071 A1 6/2012 Hijikata et al.
2013/0022481 A1 1/2013 Schob et al.
2013/0263438 A1 * 10/2013 Burns A61B 8/44
29/592.1
2015/0129039 A1 5/2015 Mulvaney
2015/0227145 A1 8/2015 Reddy et al.
2016/0097668 A1 4/2016 Vilag

FOREIGN PATENT DOCUMENTS

CN 104897239 A 9/2015
CN 204758082 U 11/2015
CN 105592834 A 5/2016
EP 0149132 5/1989
EP 2676652 12/2013
EP 2997950 A2 3/2016
GB 805539 A 12/1958
GB 2156218 A 10/1985
JP H0678858 3/1994
JP 2007263028 A 10/2007
WO WO2016059409 A2 4/2016

OTHER PUBLICATIONS

Lexor Pedicure Spa User Manual (<http://uspedicurespa.com/resources/lexor/luminous-spa-pedicure-chair-owner-manual.pdf>), Aug. 15, 2016.
Maestro Pedicure Spa Owner's Manual (www.universalcompanies.com/Files/ashx?id=c1571259-e567-4fcc-a079-...), Aug. 15, 2016.
ANS Magnet Liner Jet (ALJ) Pedicure Spa Jet—Complete Set (<http://buynailsdirect.com/ans-liner-jet-ali-pedicure-spa-jet-complete-set.html>), Aug. 15, 2016.
Auto-Fill Sensor 2.15 (<https://lexor.com/Store/Product/Auto-Fill-Sensor-2-15>), Aug. 15, 2016.

* cited by examiner

U.S. Patent

Feb. 26, 2019

Sheet 1 of 21

US 10,215,177 B2

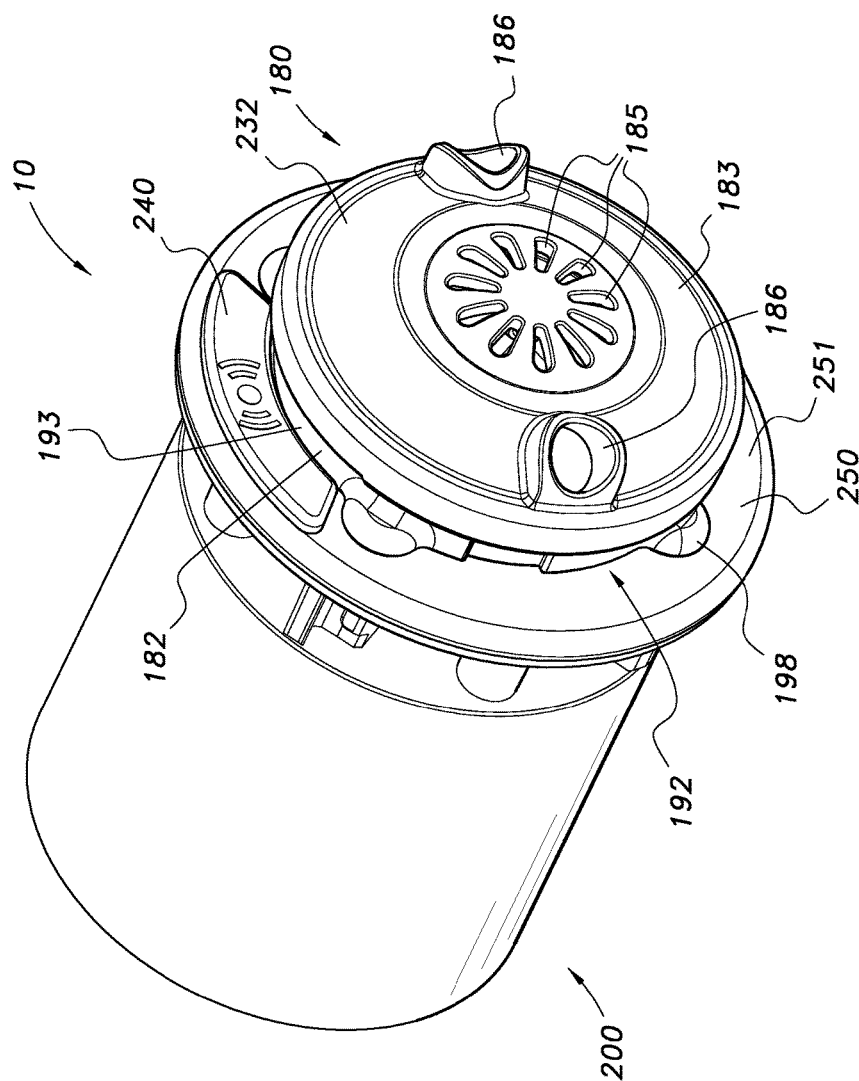


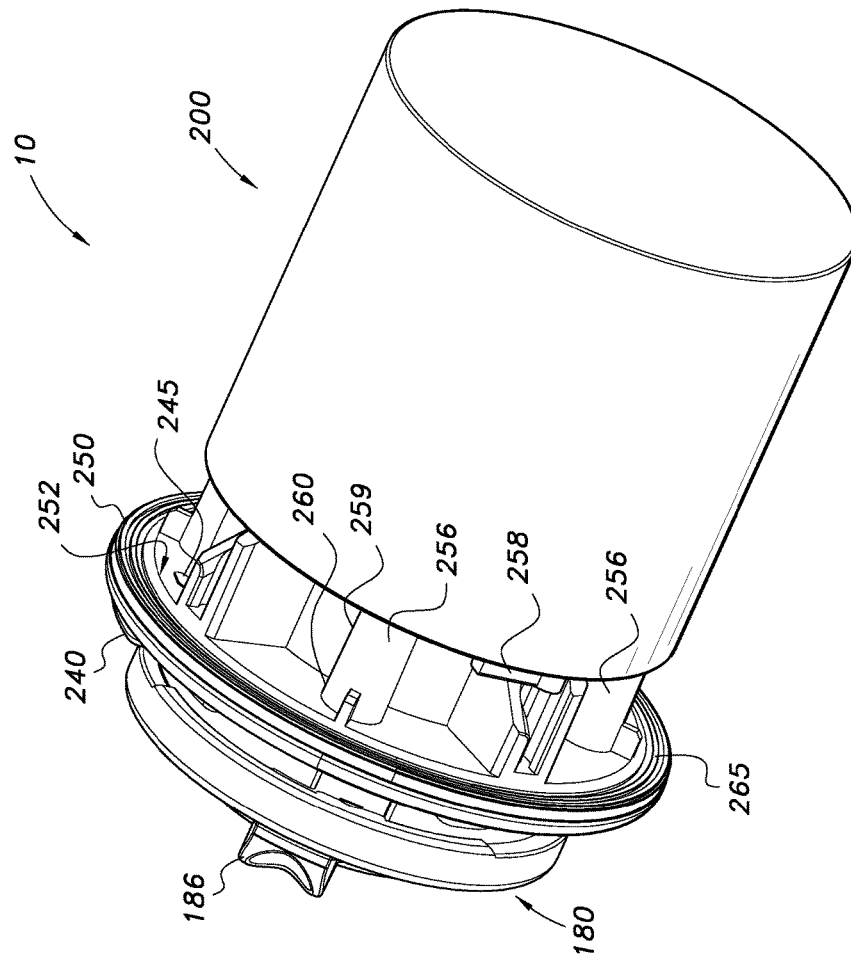
FIG. 1

U.S. Patent

Feb. 26, 2019

Sheet 2 of 21

US 10,215,177 B2

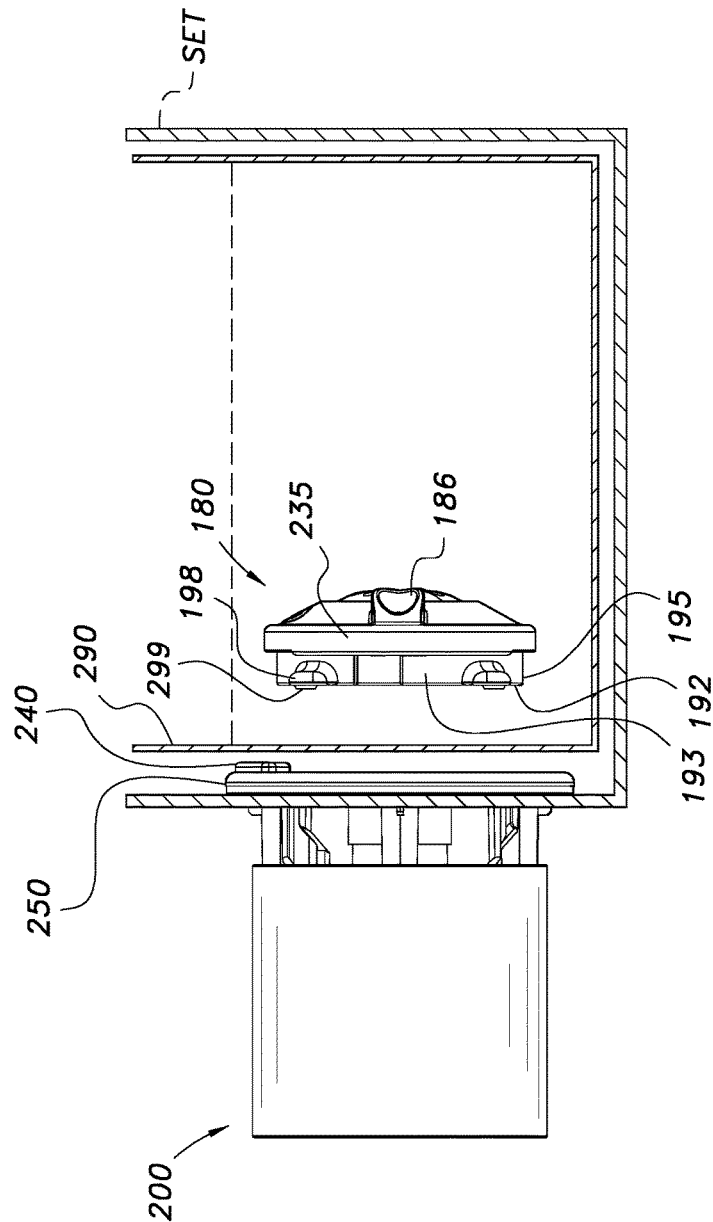


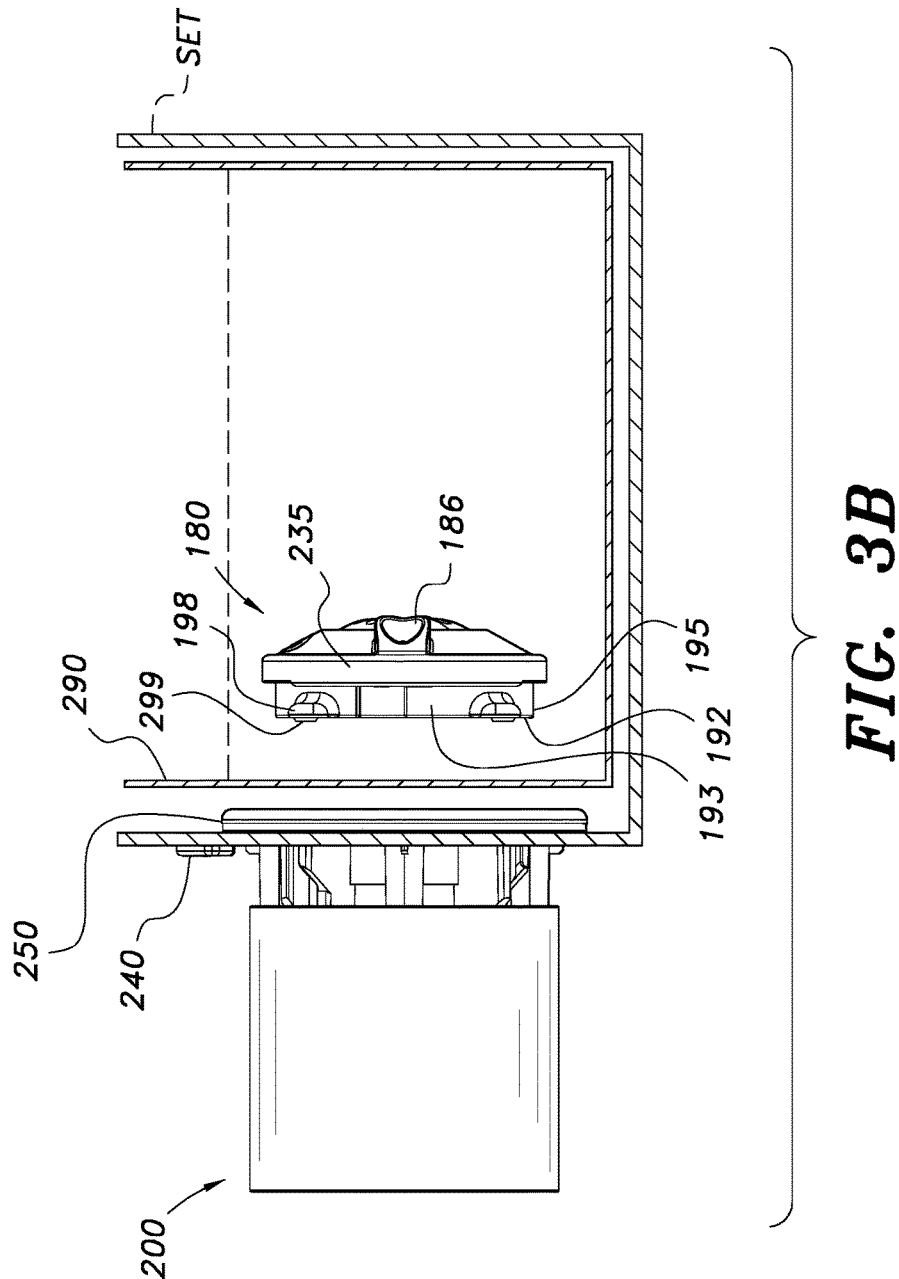
U.S. Patent

Feb. 26, 2019

Sheet 3 of 21

US 10,215,177 B2





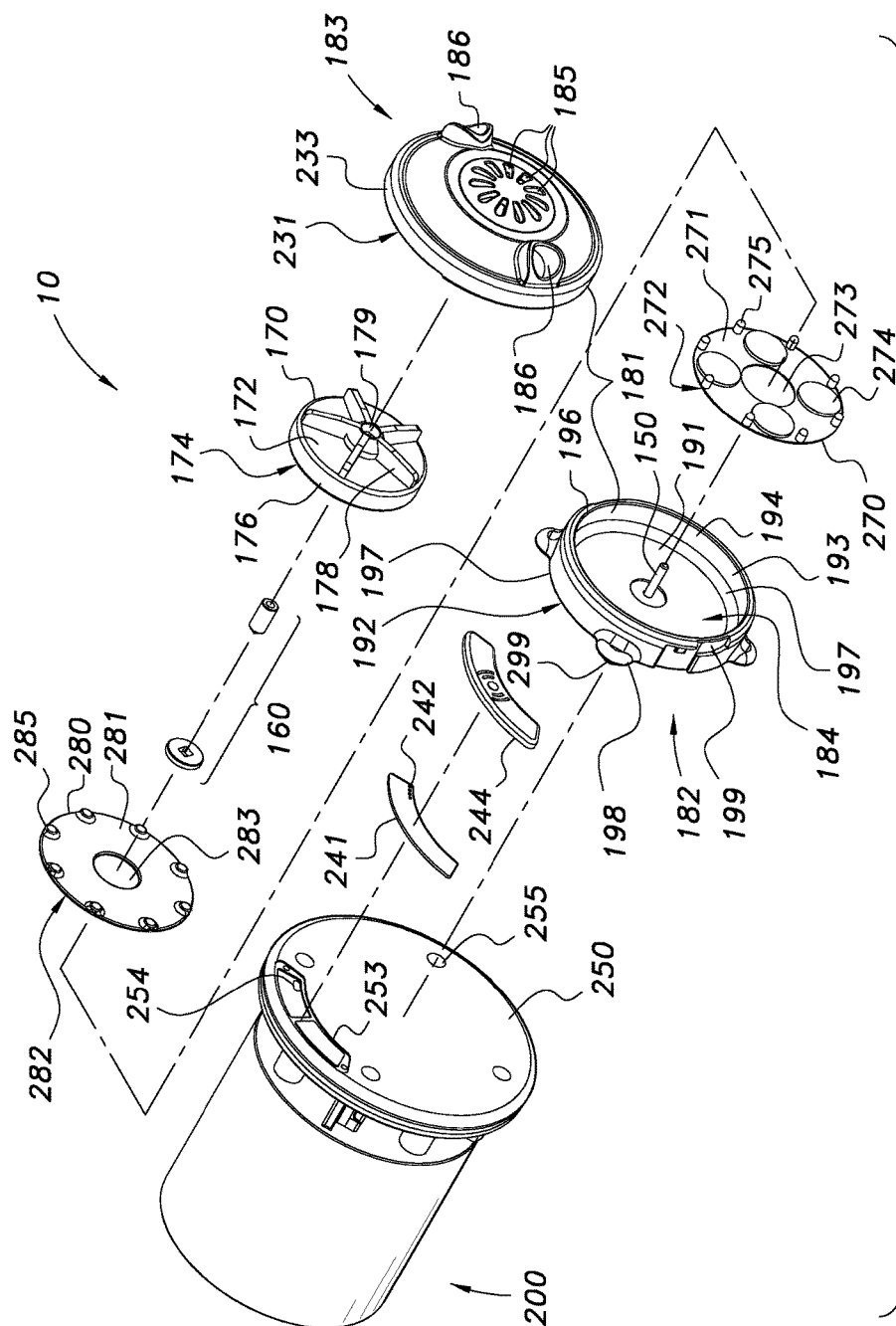


FIG. 4

U.S. Patent

Feb. 26, 2019

Sheet 6 of 21

US 10,215,177 B2

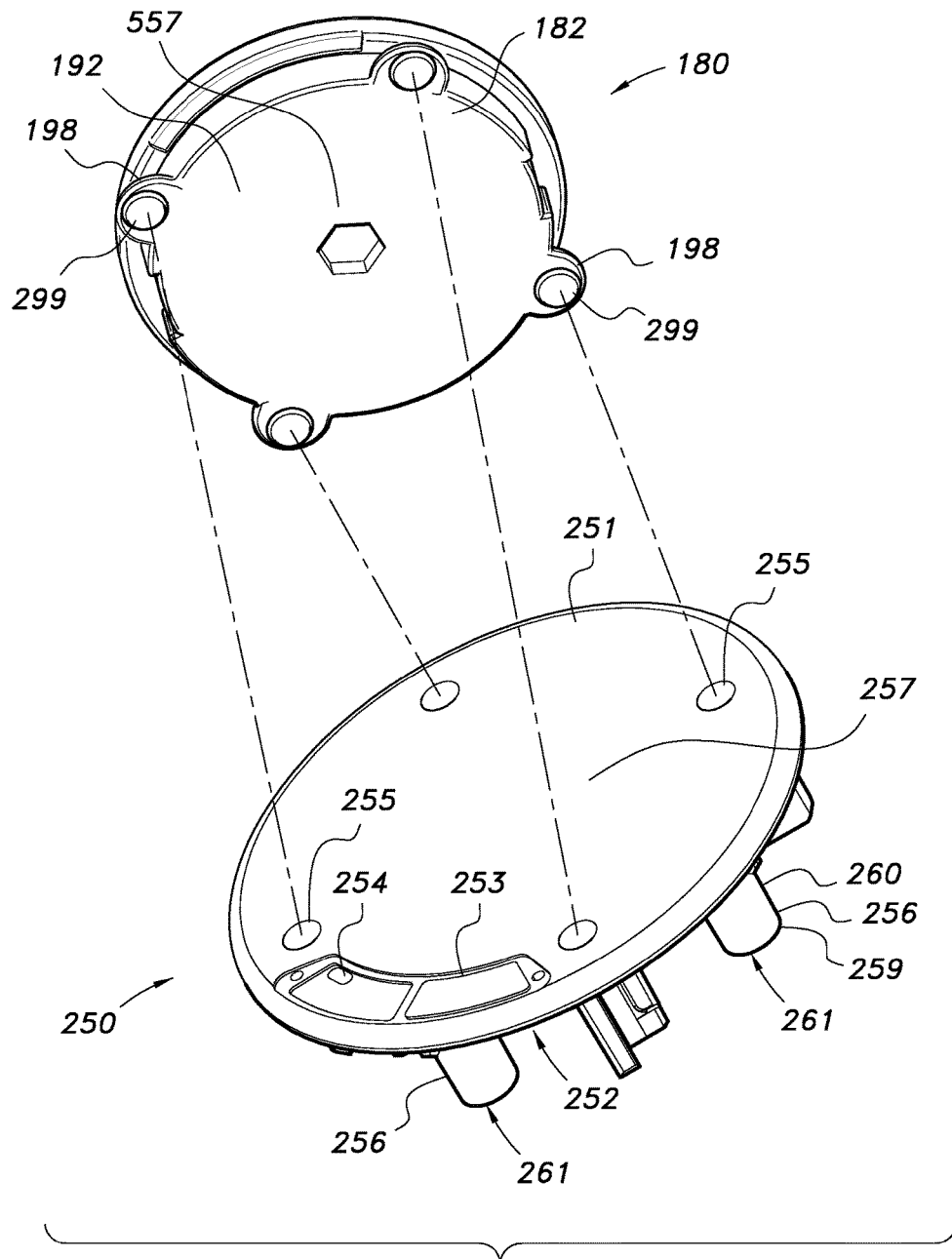
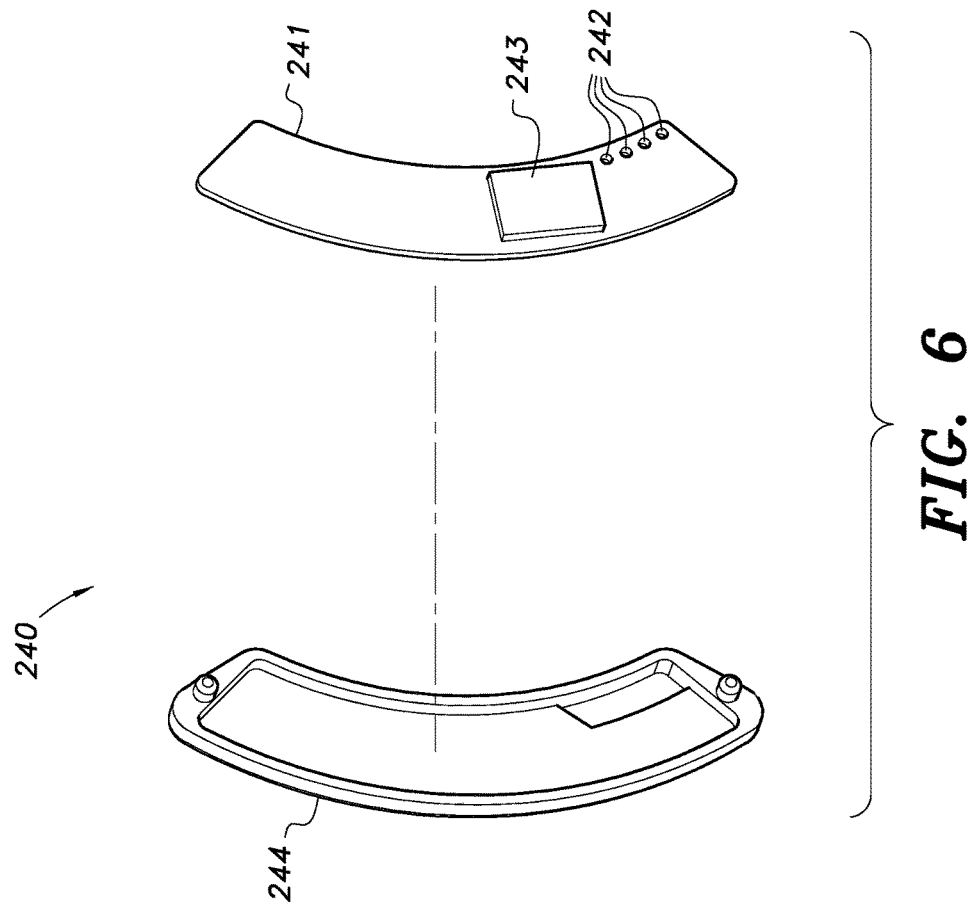


FIG. 5



U.S. Patent

Feb. 26, 2019

Sheet 8 of 21

US 10,215,177 B2

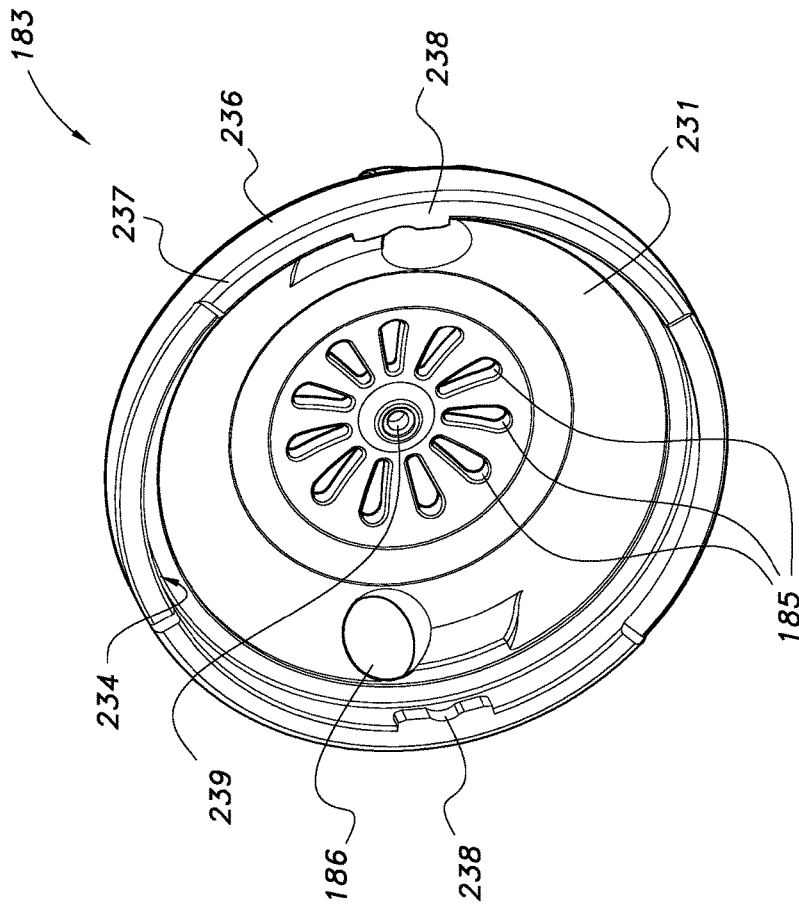


FIG. 7

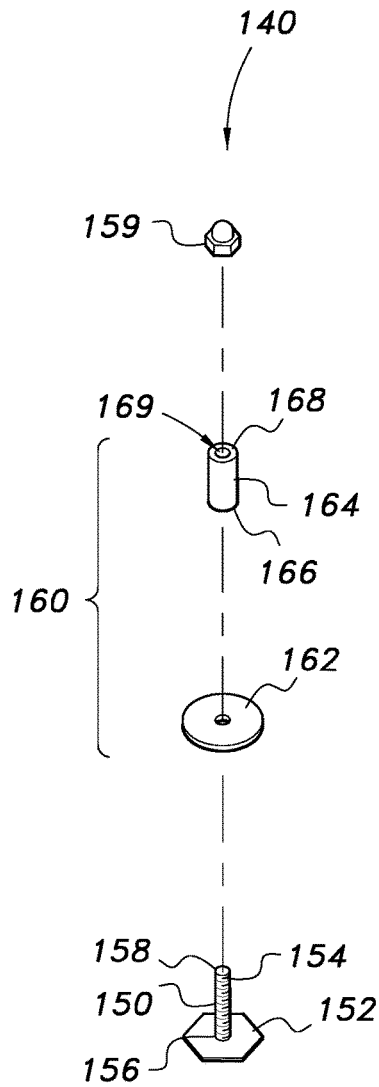


FIG. 8

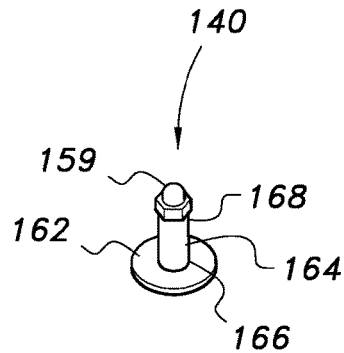


FIG. 9

U.S. Patent

Feb. 26, 2019

Sheet 10 of 21

US 10,215,177 B2

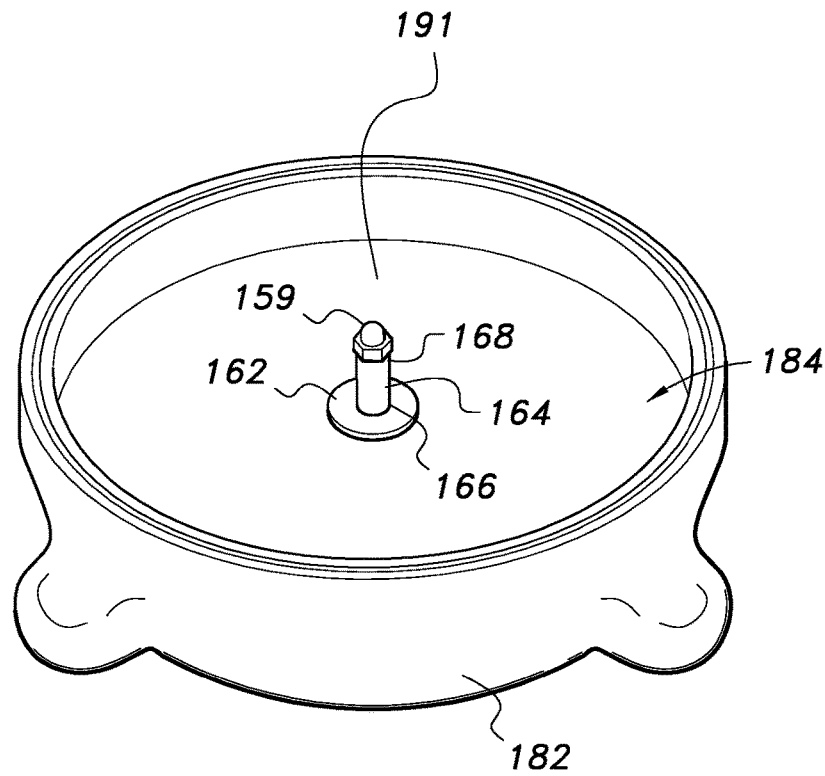


FIG. 10

U.S. Patent

Feb. 26, 2019

Sheet 11 of 21

US 10,215,177 B2

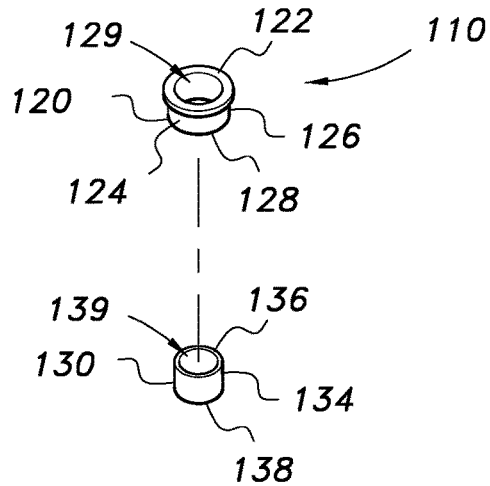


FIG. 11

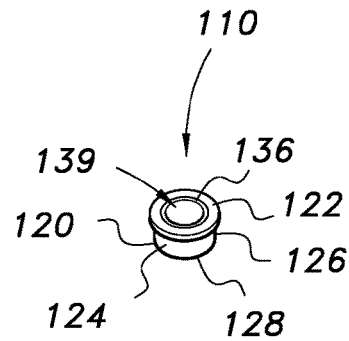


FIG. 12

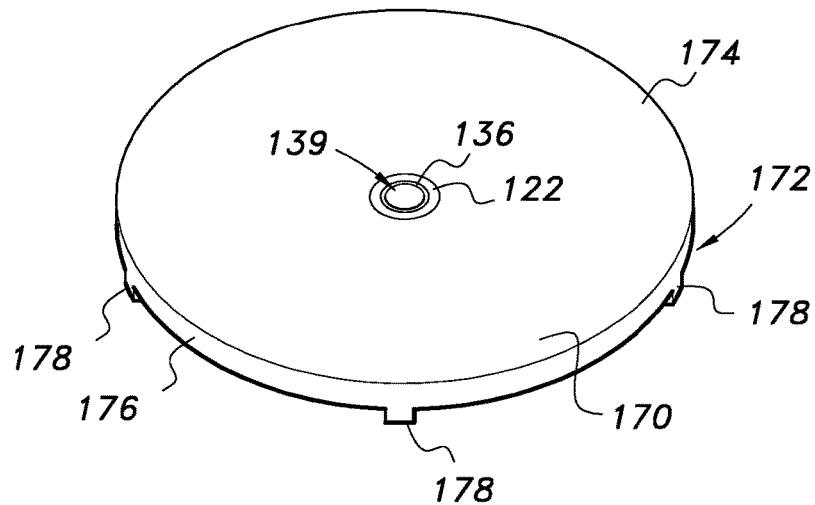
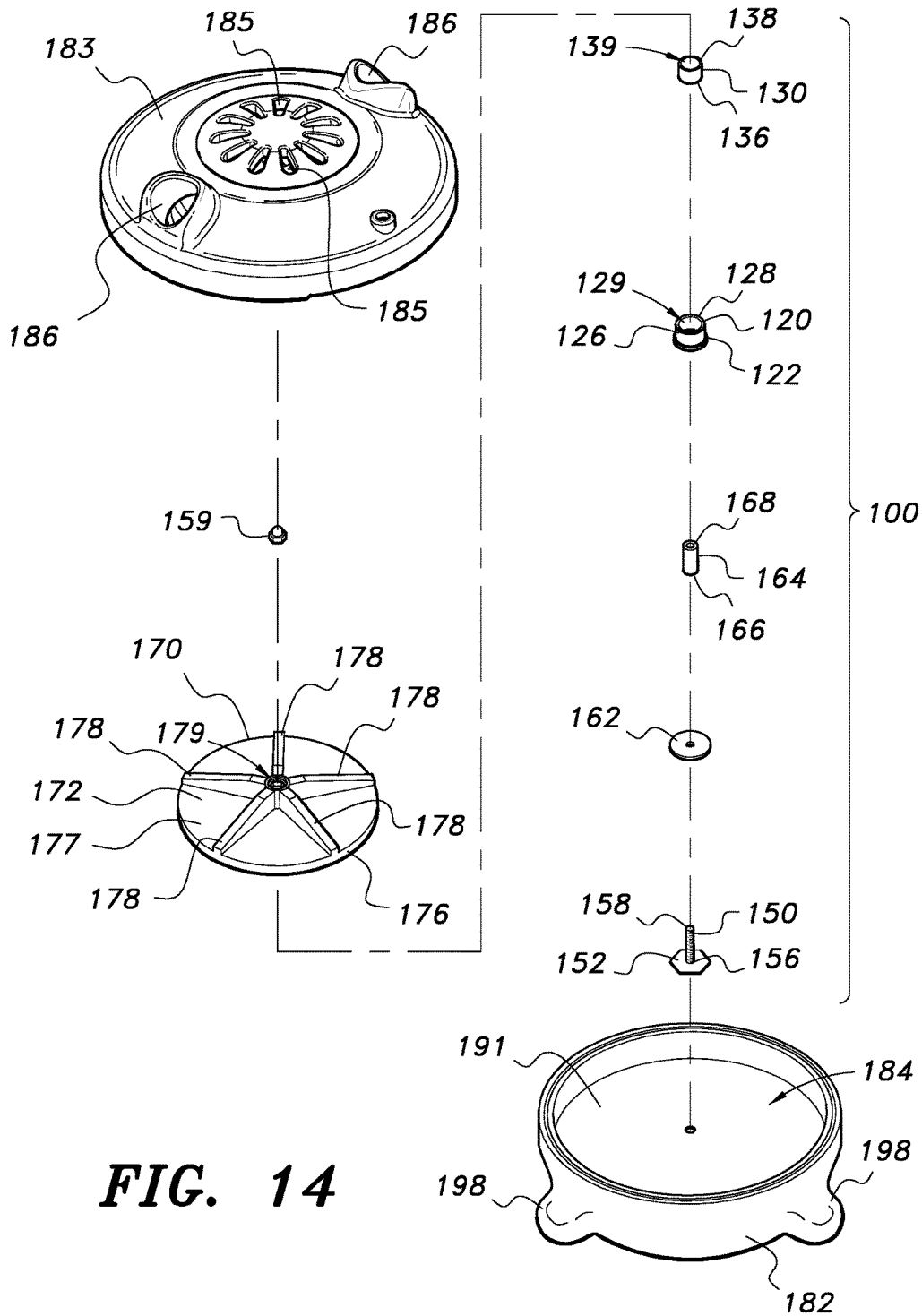


FIG. 13



U.S. Patent

Feb. 26, 2019

Sheet 13 of 21

US 10,215,177 B2

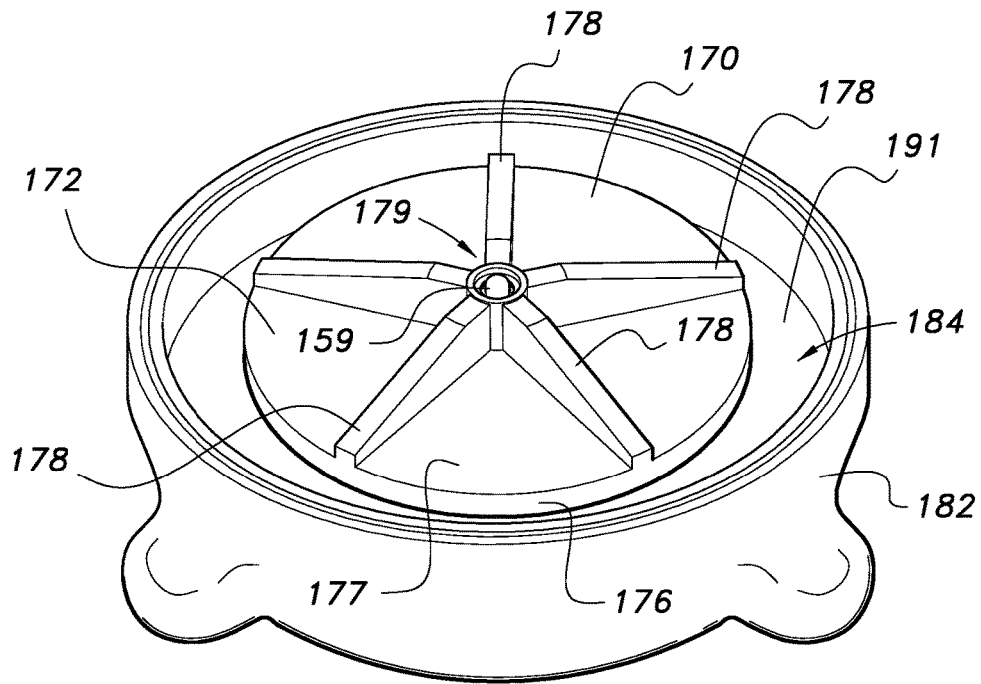


FIG. 15

U.S. Patent

Feb. 26, 2019

Sheet 14 of 21

US 10,215,177 B2

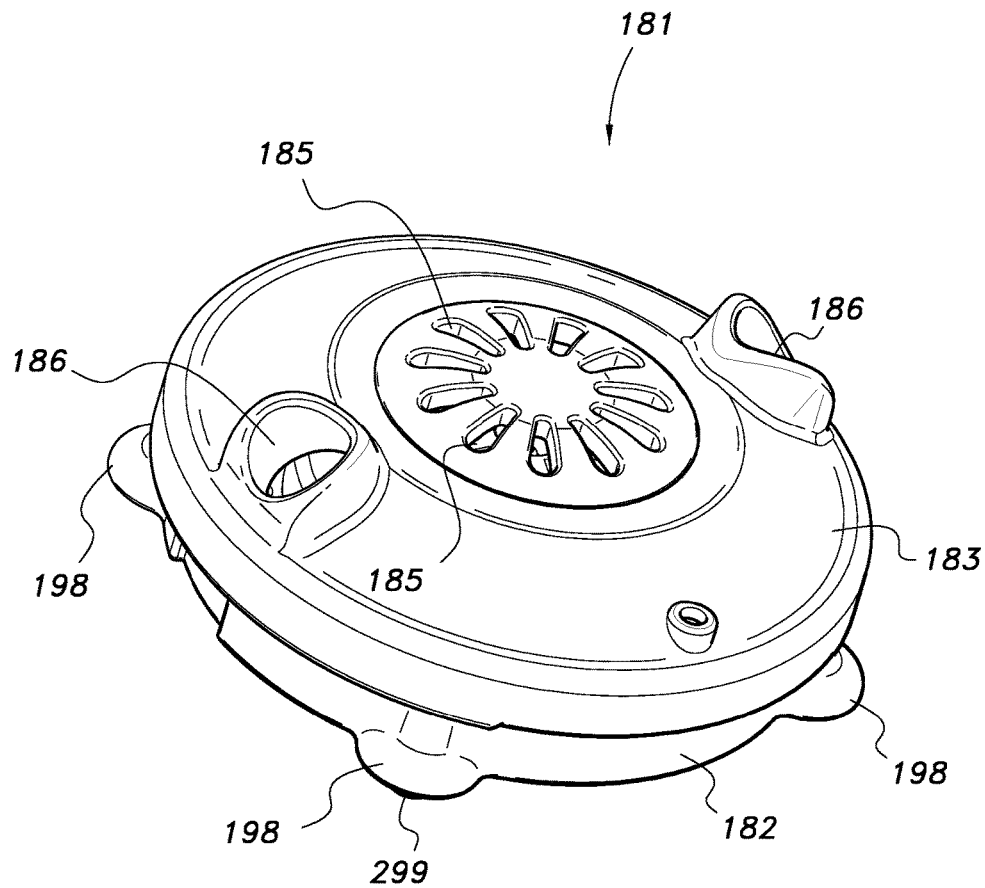


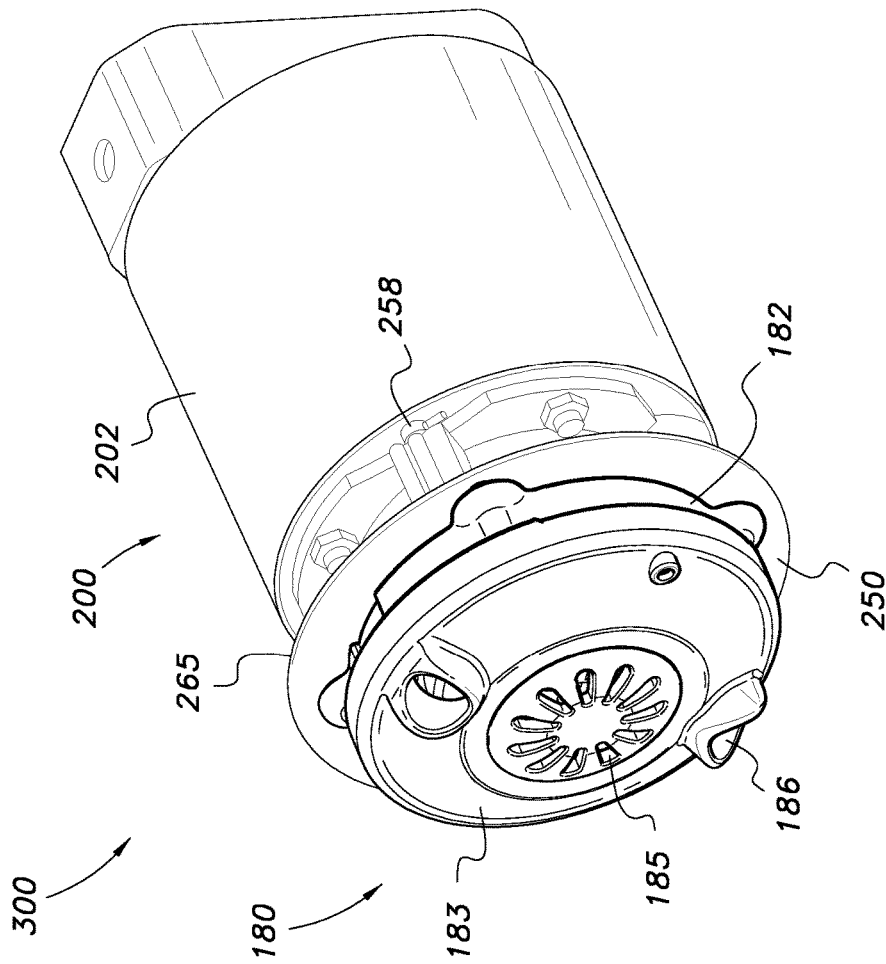
FIG. 16

U.S. Patent

Feb. 26, 2019

Sheet 15 of 21

US 10,215,177 B2



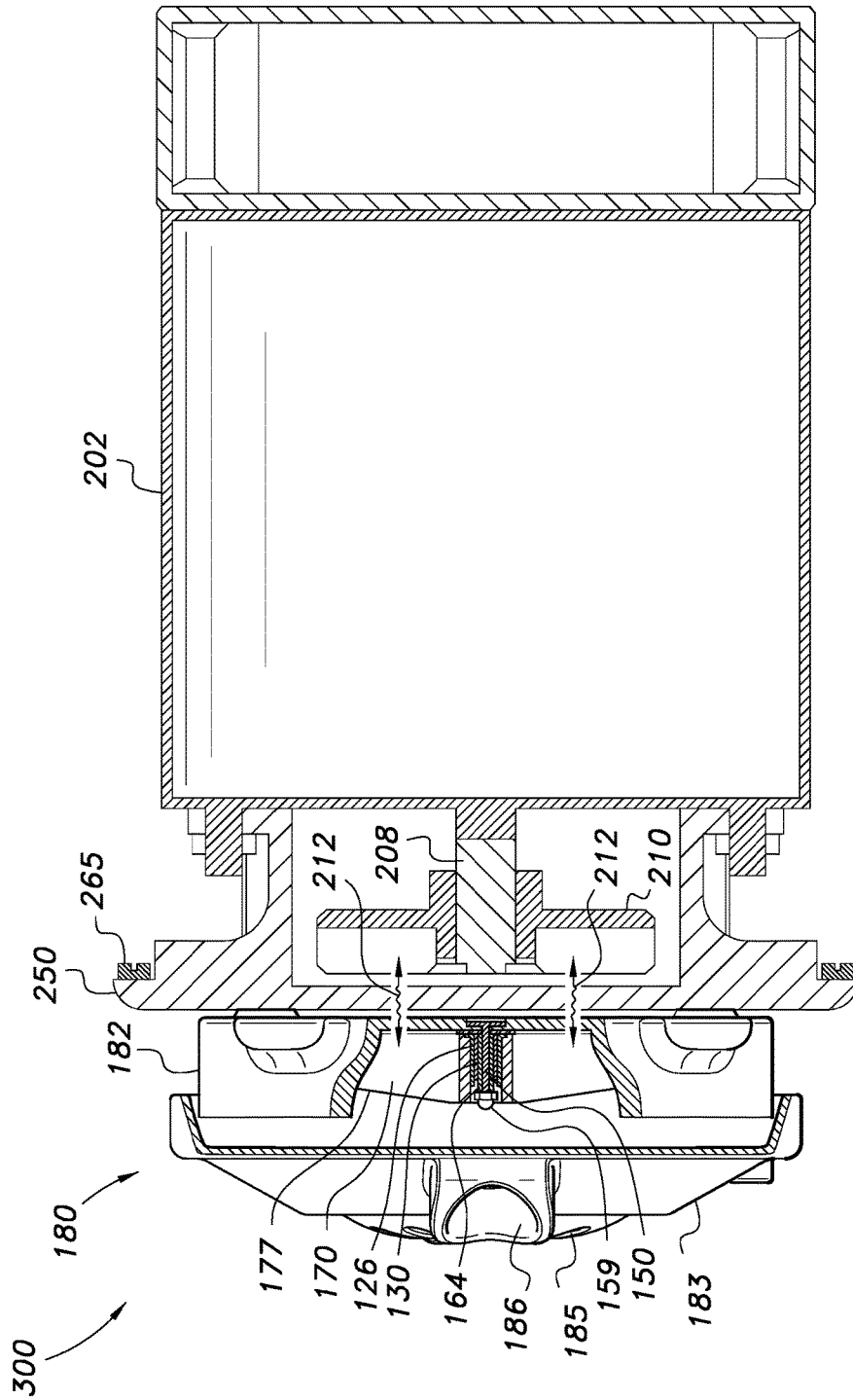


FIG. 18A

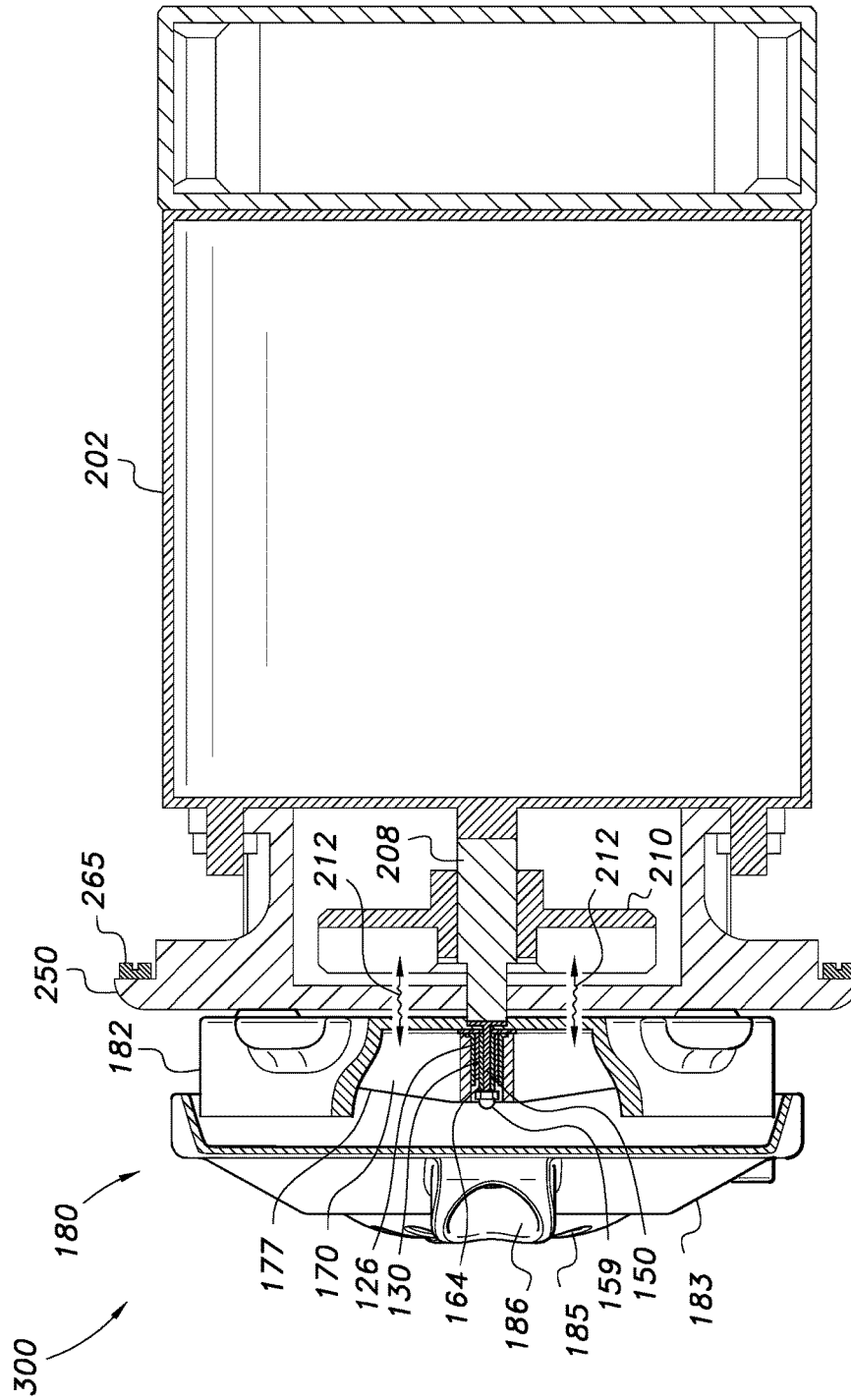
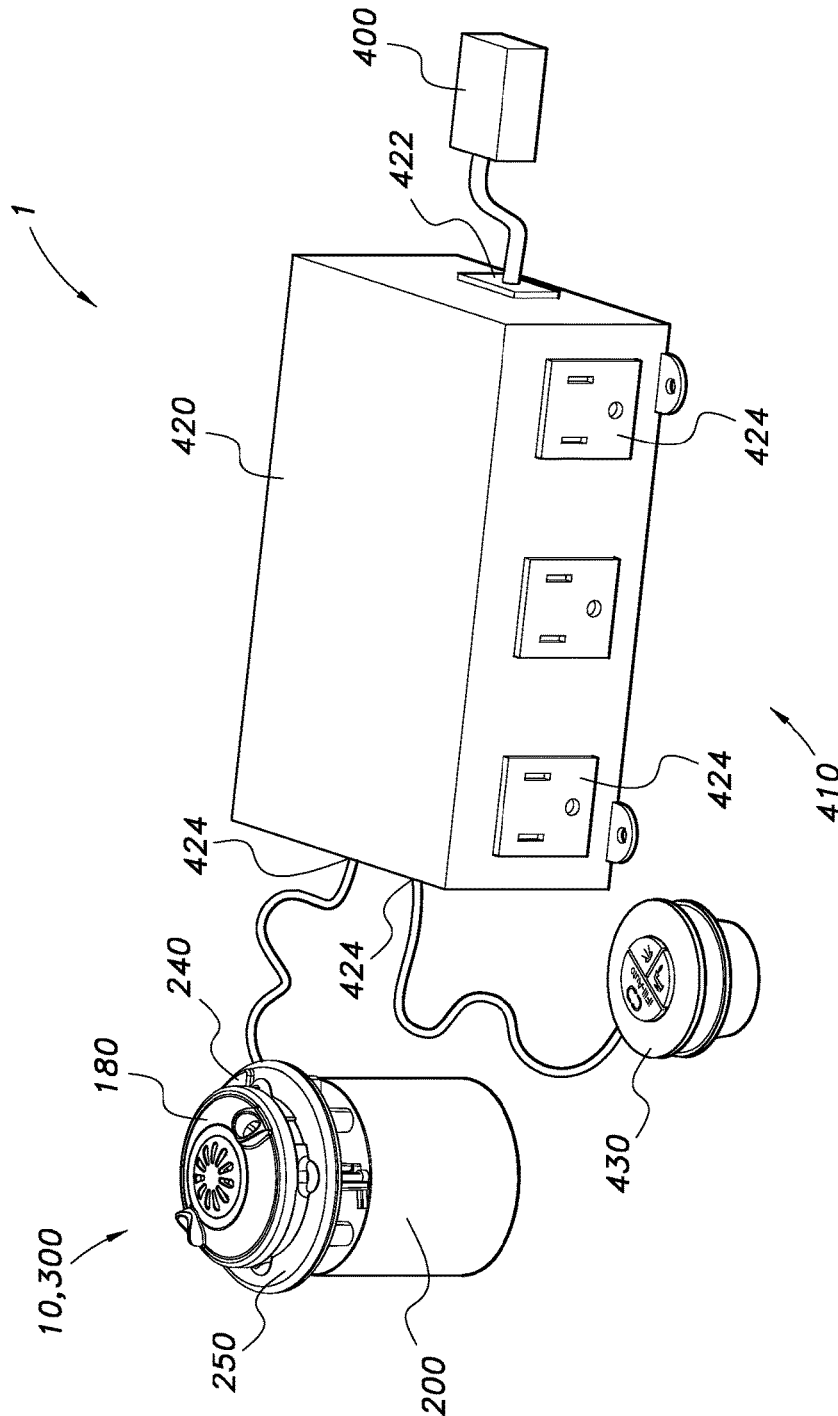


FIG. 18B



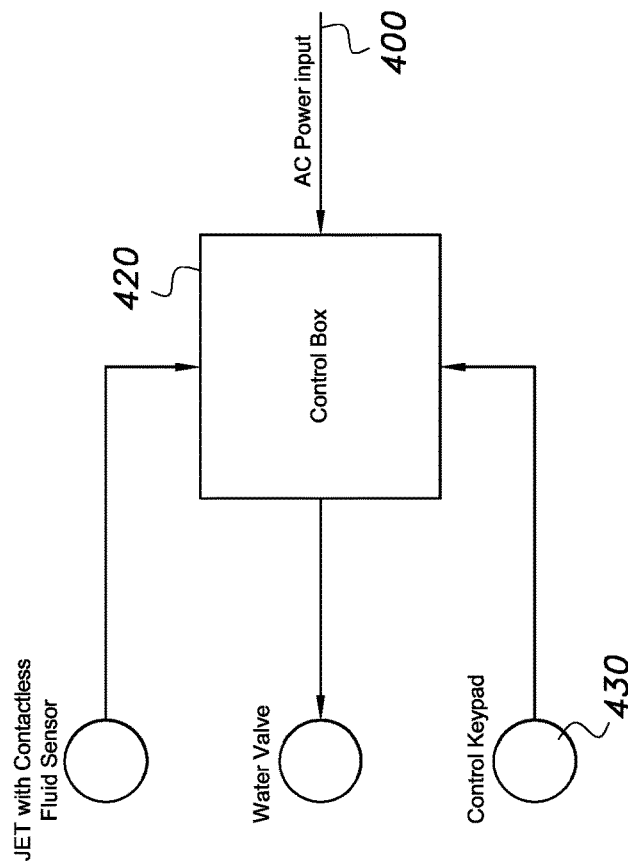
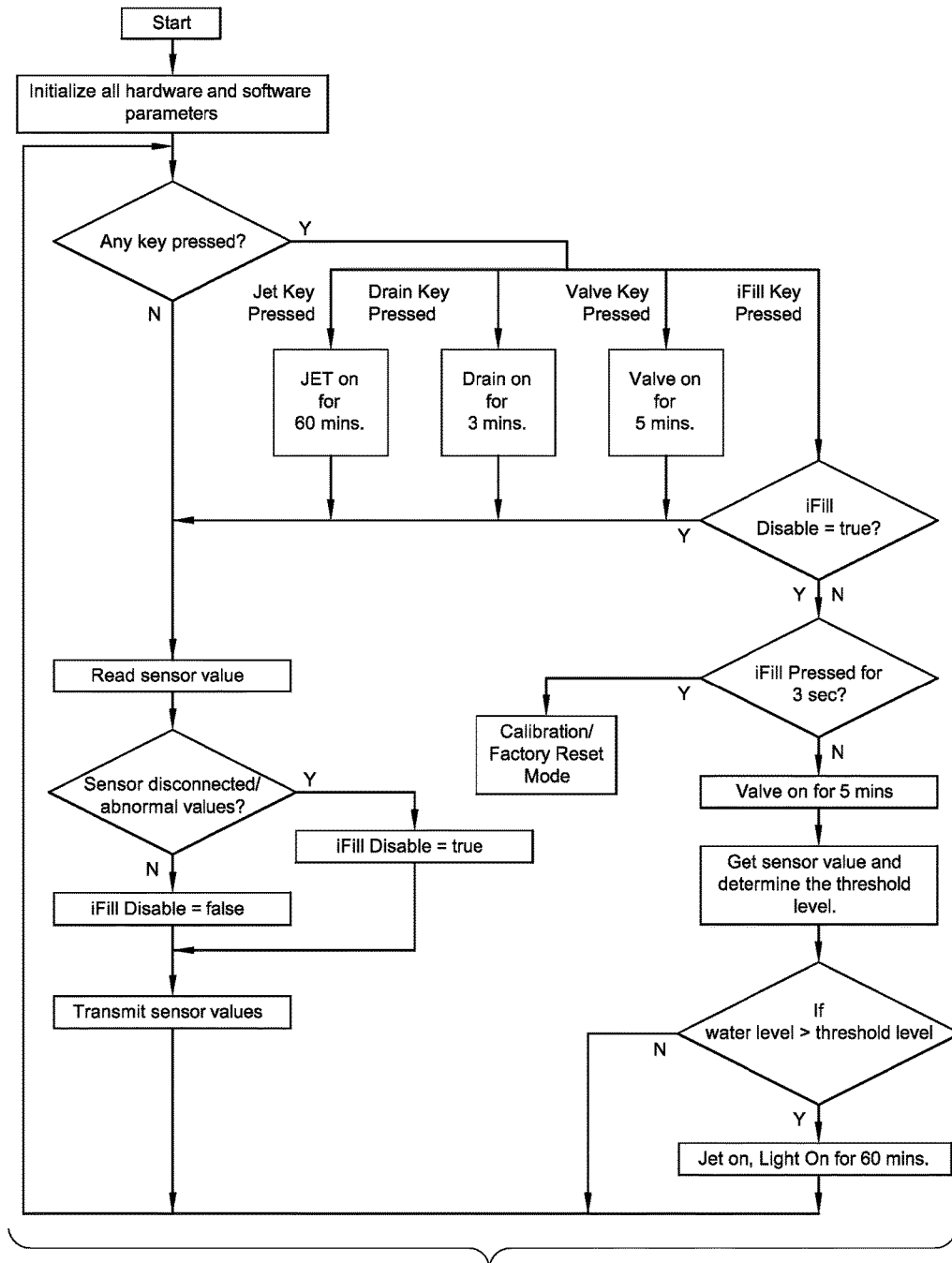


FIG. 20

**FIG. 21**

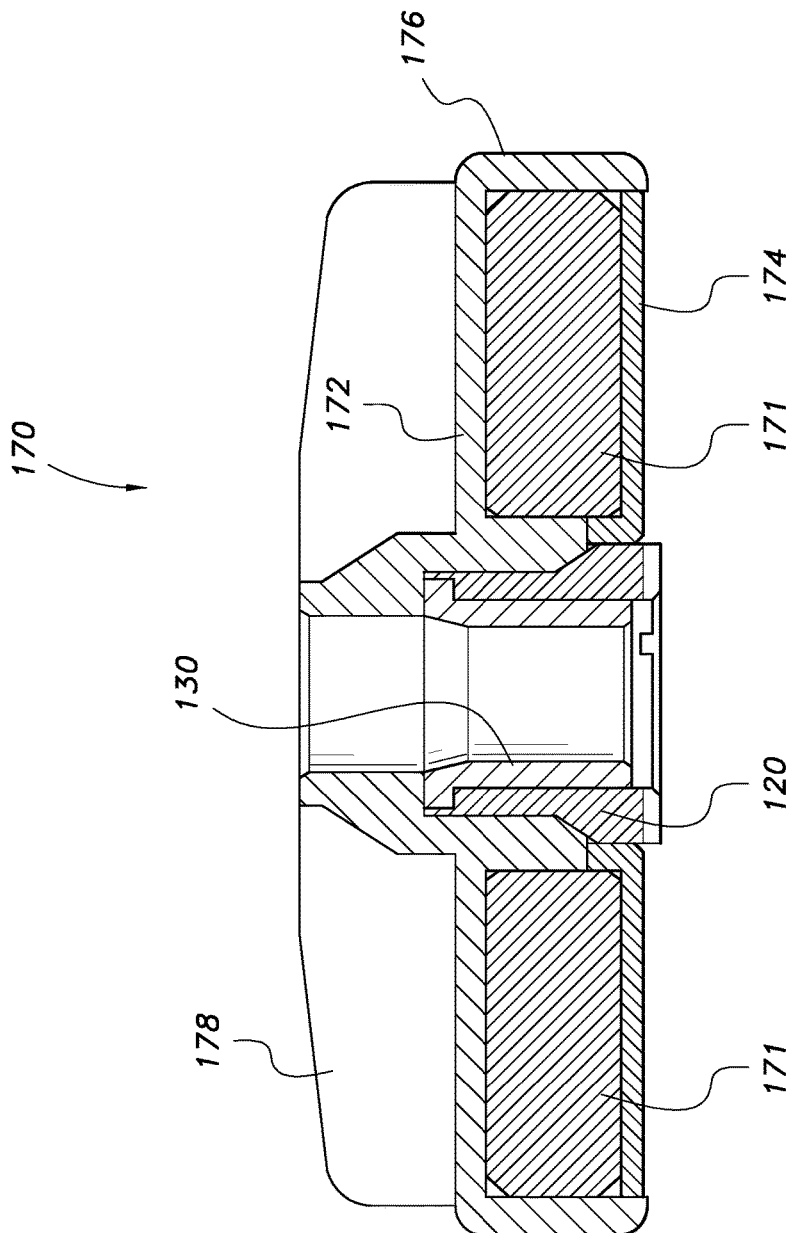


FIG. 22

US 10,215,177 B2

1

**FLUID PUMP FOR DISPENSING A FLUID TO
A SETTING OR WORK ENVIRONMENT****CROSS-REFERENCE TO RELATED
APPLICATIONS**

The present application is a continuation application of and claims the priority benefit of U.S. Nonprovisional patent application Ser. No. 15/237,595, filed Aug. 15, 2016, which is a continuation-in-part application of and claims the priority benefit of U.S. Nonprovisional patent application Ser. No. 13/923,364, filed on Jun. 20, 2013 and issued as U.S. Pat. No. 9,926,933 B2 on Mar. 27, 2018, both of which are incorporated herein by reference in their entireties.

BACKGROUND OF THE INVENTION**Field of the Invention**

The present invention generally relates to spa devices, components, and systems. More specifically, the present invention is directed to a fluid pump for dispensing a fluid to a setting or work environment. In addition, the present invention is directed to a fluid pump having a contactless, fluid sensor for dispensing a fluid to a setting or work environment and for use with a liner, to a fluid pump apparatus comprising a fluid pump having a contactless, fluid sensor for dispensing a fluid to a setting or work environment and for use with a liner, and to a method for dispensing a fluid to a setting or work environment by use of a fluid pump having a contactless, fluid sensor for use with a liner.

Description of the Related Art

Spa devices, components, and systems are known in the art. Spa devices are used in commercial and recreational settings for hydrotherapy, massage, stimulation, pedicure, and bathing purposes. In the spa application setting, the issues with sanitization in the spa industry today require the use of a liner, such as a disposable liner. But with a liner, traditional water sensors in spa devices and settings, such as foot spas, will not be able to effectively detect fluids or water anymore. Thus, there exists a need for a fluid pump having a contactless, fluid sensor adapted for use with a liner for dispensing a fluid to a setting or work environment such that fluid or water level can be effectively detected in a setting or work environment, such as, but not limited to, a foot spa, a spa, a jacuzzi, a bathtub, or a swimming pool.

Further, because typical spa devices have extensive piping systems that are built into the spa device to transport water, the spa devices are traditionally difficult to clean. This results in downtime and complicated maintenance schedules to clean such spa devices. Furthermore, if a spa device has a light source associated with it, to replace or repair such a light source can be time consuming and complicated when the light source is not easily accessible.

In the spa environment, water is commonly added with certain substances and/or products, such as salt, chemicals, sand, massage lotions, etc. Due to this reason, traditional bearings, such as ball bearings and metal bushings, will not be suitable for a long term and reliable operation. The presence of chemicals and sand, for example, will cause some or many currently available bearings to wear out quicker than normal and result in fluid pump failures.

Additionally, for magnetic coupling-type pumps, it is almost impossible to have a perfect alignment between the

2

motor shaft axis and the impeller rotation axis. The imperfect alignment or misalignment will result in high vibration noise.

The present invention overcomes one or more of the shortcomings of the above described spa devices, components, and systems. The Applicant is unaware of inventions or patents, taken either singly or in combination, which are seen to describe the present invention as claimed.

SUMMARY OF THE INVENTION

The present invention is directed to a fluid pump for dispensing a fluid to a setting or work environment.

In one exemplary aspect, the present invention is directed to a fluid pump having a contactless, fluid sensor for dispensing a fluid to a setting or work environment and for use with a liner. The fluid pump comprises a jet assembly, a motor assembly, and a contactless, fluid sensor assembly with a contactless, fluid sensor. The fluid pump may further comprise a mounting housing member or coupling device, a gasket or seal, and a liner when a liner is not already present.

In another exemplary aspect, the present invention is directed to a fluid pump apparatus comprising a fluid pump having a contactless, fluid sensor for dispensing a fluid to a setting and for use with a liner. In addition to comprising the fluid pump, the fluid pump apparatus further comprises a power source for providing power to the fluid pump, and/or a control apparatus.

The jet assembly is secured, attached or coupled to the motor assembly.

In a non-limiting embodiment, the jet assembly includes a jet assembly housing, and preferably also includes a printed circuit board (PCB), a PCB cover, a shaft assembly, and an impeller.

The jet assembly housing includes a base, a front or top cover, an impeller-receiving chamber defined by the base and front or top cover, at least one inlet aperture dimensioned and configured to allow a fluid to enter the jet assembly housing, and at least one outlet aperture dimensioned and configured to allow the fluid to exit or be dispensed from the jet assembly housing into a setting.

The shaft assembly includes at least the shaft member.

The impeller, preferably a magnetic impeller, is configured to rotate about the shaft member and to rotate within the impeller-receiving chamber such that rotation of the impeller causes fluid to enter or flow into the inlet aperture and to exit or flow out of the outlet aperture.

The motor assembly may include and/or be coupled to the power source that enables rotation of the motor shaft member and impeller.

The contactless, fluid sensor assembly includes a contactless, fluid sensor or sensor circuit board, and may also include a sensor cover and a sensor output data cable.

The contactless, fluid sensor may be secured, attached, fixed or mounted to any position on the other components of the fluid pump, such as, but not limited to, the mounting housing member or coupling device, or even be positioned at a location away from the fluid pump, that allows the sensor to be in operative communication with the other components of the fluid pump whereby the contactless, fluid sensor is effective, especially when a liner is being used in or with the setting, in capacitive sensing of fluid or water level in the setting such that the amount or volume of fluid or water can be controlled.

US 10,215,177 B2

3

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid to a setting by use of a fluid pump having a contactless, fluid sensor adapted for use with a liner.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front, right side, perspective view of a fluid pump having a contactless, fluid sensor according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another;

FIG. 2 is a rear, left side, perspective view of the fluid pump of FIG. 1;

FIG. 3A is a right side, partial cross-sectional, environmental view of the fluid pump of FIG. 1, wherein the motor assembly is secured to or proximate to a setting, such as an internal wall of a foot spa, while the jet assembly will be secured or coupled to or about the motor assembly prior to operation or use, wherein a liner will be positioned between the motor assembly and jet assembly prior to operation or use, and wherein a contactless, fluid sensor is shown secured to a mounting housing member and positioned about the motor assembly and behind the liner prior to operation or use;

FIG. 3B is a right side, partial cross-sectional, environmental view of another embodiment of a fluid pump having a contactless, fluid sensor according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another, wherein the motor assembly is secured to or proximate to a setting, such as an internal wall of a foot spa while the jet assembly will be secured or coupled to or about the motor assembly prior to operation or use, wherein a liner will be positioned between the motor assembly and jet assembly prior to operation or use, and wherein a contactless, fluid sensor is shown secured behind the internal wall of a foot spa and positioned about the motor assembly and behind the liner prior to operation or use;

FIG. 4 is an exploded, perspective view of the fluid pump of FIG. 1;

FIG. 5 is an exploded, perspective view of a jet assembly and a mounting housing member or coupling device according to the present invention;

FIG. 6 is a front view of a contactless, fluid sensor assembly according to the present invention;

FIG. 7 is a rear, perspective view of a front or top cover of a jet assembly housing according to the present invention, showing an inner surface of the front or top cover;

FIG. 8 is an exploded, perspective view of a shaft assembly according to the present invention;

FIG. 9 is an assembly, perspective view of the shaft assembly of FIG. 8;

FIG. 10 is an assembly, perspective view of the shaft assembly of FIG. 8 positioned relative to a jet assembly housing (without a front or top cover) of a jet assembly;

FIG. 11 is an exploded, perspective view of a bearing assembly of a bearing and shaft assembly according to the present invention;

FIG. 12 is an assembly, perspective view of the bearing assembly of FIG. 11;

FIG. 13 is an assembly, perspective view of the bearing assembly of FIG. 11 positioned within a cavity of an impeller;

FIG. 14 is an exploded, perspective view of the bearing assembly of FIG. 11, the shaft assembly of FIG. 8, and a jet assembly (with a front or top cover);

4

FIG. 15 is an assembly, perspective view of the bearing and shaft assembly of FIGS. 8 and 11, and the impeller and jet assembly housing of the jet assembly (without the front or top cover) of FIG. 14;

FIG. 16 is an assembly, perspective view of the bearing and shaft assembly of FIGS. 8 and 11, and the impeller and jet assembly housing of the jet assembly (with the front or top cover) of FIG. 14;

FIG. 17 is a perspective view of a magnetic, coupling-type pump according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another, and not including a contactless, fluid sensor assembly nor a liner;

FIG. 18A is a cross-sectional view of the magnetic, coupling-type pump of FIG. 17;

FIG. 18B is a cross-sectional view of another embodiment of a magnetic, coupling-type pump according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another, and not including a contactless, fluid sensor assembly nor a liner;

FIG. 19 is a perspective view of a fluid pump apparatus according to the present invention, showing a fluid pump and a control device or keypad being connected to a control box;

FIG. 20 is a schematic view of a control box according to the present invention, showing the control box being in operative connection or communication with a fluid pump, a control device or keypad, a fluid valve, and a power source;

FIG. 21 is a schematic block diagram of an embodiment of controlling fluid or water level in a setting via the use of a fluid pump having a contactless, fluid sensor according to the present invention, showing the relationships or associations of various components, such as a control keypad or device being in operative connection or communication with the fluid pump, a control box, a fluid valve, and a power source; and

FIG. 22 is a cross-sectional view of a magnetic impeller according to the present invention.

It should be understood that the above-attached figures are not intended to limit the scope of the present invention in any way.

DETAILED DESCRIPTION OF THE
PREFERRED EMBODIMENTS

The present invention is directed to a fluid pump for dispensing a fluid to a setting or work environment. Referring to FIGS. 1-22, the present invention is directed to a fluid pump 10,300, preferably a magnetic, coupling-type pump, having a contactless, fluid sensor 241 for dispensing a fluid to a setting SET or work environment, such as, but not limited, to a foot spa, a spa, a jacuzzi, a bathtub, or a swimming pool, and for use with a liner 290. The setting SET or work environment may be preferably be in manicure and pedicure industries and similar industries. The fluid pump 10 comprises a jet assembly 180, a motor assembly 200, and a contactless, fluid sensor assembly 240 having a contactless, fluid sensor 241. The fluid pump 10 may further comprise a mounting housing member or coupling device 250, a gasket or seal 265, and/or a liner 290 when a liner is not already provided or present. In addition, the present invention is also directed to a fluid pump apparatus 1. Besides comprising the fluid pump 10, the fluid pump apparatus 1 further comprises a power source 400 for providing power to the fluid pump 10, and/or a control apparatus 410.

US 10,215,177 B2

5

The jet assembly **180** is secured, attached or coupled to the motor assembly **200**, and this may be accomplished by various means. As a non-limiting example and as shown in FIGS. 1-4, the jet assembly **180** is secured, attached or coupled to or about the motor assembly **200** by the assistance of the mounting housing member **250**.

As a non-limiting example and as best shown in FIGS. 4 and 7-16, the jet assembly **180** preferably includes: a jet assembly housing **181** that has a printed circuit board (PCB) **270** and a PCB cover **280**; a shaft assembly **140**; and an impeller **170**. As an alternative, the jet assembly **180** may be substituted with the jet assembly **180'**. As shown in FIGS. 8-18, the jet assembly **180'** includes: a jet assembly housing **181** that does not have the PCB **270** nor the PCB cover **280**; a bearing and shaft assembly **100**; and an impeller **170**.

As shown in FIGS. 1, 3A-5, 7, 10 and 14-16, the jet assembly housing **181** includes a base **182**, a front or top cover **183**, an impeller-receiving chamber **184** defined by the base **182** and front or top cover **183**, a plurality of inlet apertures **185** dimensioned and configured to allow a fluid to enter the jet assembly housing **181** and preferably disposed about the central area of the front or top cover **183**, and a plurality of outlet apertures **186** dimensioned and configured to allow the fluid to exit or be dispensed from the jet assembly housing into the setting SET and preferably disposed about the periphery of the front or top cover **183**.

As best shown in FIGS. 4, 10 and 14-16, the base **182** of the jet assembly housing **181** has an inner surface **191**, an outer surface **192**, a circular wall **193** at or about the periphery of the base **182**, a plurality of feet extensions **198**, and a plurality of engagement recesses or grooves **199**. Preferably, the outer surface **192** is generally flat or has a generally flat, centrally-located section **557** that allows for a liner **290** to be positioned behind (or below) the base **182** of the jet assembly housing **181** and in front of (or above) the contact surface of the setting SET and motor assembly **200**, as shown in FIGS. 3A and 3B. The circular wall **193** has an inner surface **194**, an outer surface **195**, a front or top **196**, and a rear or bottom **197**. Each of the plurality of feet extensions **198** extends outwardly from about the rear or bottom **197** of the circular wall **193**, and has a knob **299** extending rearwardly or downwardly from the corresponding feet extension **198** for engaging with the mounting housing member **250**. Each of the plurality of engagement recesses or grooves **199** is positioned at a predetermined location about the outer surface **195** of the circular wall **193** for engaging with and securing the front or top cover **183**. The base **182** may be made or manufactured of plastic, hard plastic, and/or any other suitable material known to one of ordinary skill in the art.

As best shown in FIGS. 1, 4, 7, 14 and 16, the front or top cover **183** of the jet assembly housing **181** has an inner surface **231**, an outer surface **232**, a circular wall **233** at or about the periphery of the front or top cover **183**, a plurality of engagement protrusions **238**, and a lock-receiving cavity **239**. The circular wall **233** has an inner surface **234**, an outer surface **235**, a front or top **236**, and a rear or bottom **237**. Each of the plurality of engagement protrusions **238** is positioned at a predetermined location about the inner surface **234** of the circular wall **233** for engaging with a corresponding engagement recess or groove **199** of the base **182** such that the base **182** and front or top cover **183** may be detachably secured to one another prior to and during operation or use and also may be detachably unsecured from one another after operation or use for allowing access to the components, maintenance, etc. The lock-receiving cavity **239** is configured and positioned at a predetermined location

6

about the inner surface **231** of the front or top cover **183** such that the lock-receiving cavity **239** receives the tip of the shaft member **150** (or locking mechanism **159'**) when the base **182** and front or top cover **183** are detachably secured to one another prior to and during operation or use. The front or top cover **183** may be made or manufactured of plastic, hard plastic, and/or any other suitable material known to one of ordinary skill in the art.

Preferably, the plurality of inlet apertures **185** form an outer diameter that is equal to or smaller than the outer diameter of the impeller **170**.

Preferably, each of the outlet apertures **186** has a nozzle. Preferably, each of the nozzles and an axis of the fluid pump **10,300** form an angle less than 90 degree.

As shown in FIG. 4, the PCB **270** of the jet assembly housing **181** has a "disc-like" configuration or shape, and includes a front or top side **271**, a rear or bottom side **272**, a hole **273**, a plurality of inductive coils **274**, and a light source **275**, such as, but not limited to, a plurality of LED light members **275**. The hole **273** allows the shaft member **150** to pass through, and is preferably centrally located. The plurality of inductive coils **274** are positioned at predetermined locations on the front or top side **271** proximate the hole **273**. The plurality of LED light members **275** are positioned at predetermined locations on the front or top side **271** about the periphery of the PCB **270**, and provide lighting or illumination to the jet assembly housing **181**. The PCB **270** is secured or attached to the base **182** prior to operation or use such that the rear or bottom side **272** of the PCB **270** is adjacent or in close proximity to the inner surface **191** of the base **182**. The PCB **270** may be secured or attached to the base **182** by any method known to one of ordinary skill in the art.

Preferably, the light source **275** is configured to emit a light that illuminates the first fluid, when the magnetic array **177,210** is driven. The impeller **170** causes the first fluid to flow into the the plurality of inlet apertures **185** and out the the plurality of outlet apertures **186**. Illuminating the first fluid via the light source **275** includes providing energy to the light source **275** via magnetic waves captured by the inductive coils **274**, which are positioned between the impeller **170** and base **182** of the jet assembly housing **181**. As a non-limiting example, the parameter of the illumination includes at least one of intensity, color, illumination sequencing, and any combination thereof.

As shown in FIG. 4, the PCB cover **280** of the jet assembly housing **181** has a "disc-like" configuration or shape, and includes a front or top side **281**, a rear or bottom side **282**, a hole **283**, and a plurality of LED light member covers **285**. The hole **283** allows the shaft member **150** to pass through, and is preferably centrally located. The plurality of LED light member covers **285** are positioned at predetermined locations on the front or top side **281** about the periphery of the PCB cover **280**, and are adapted for being secured or attached with corresponding LED light members **275** of the PCB **270**. The PCB cover **280** is positioned upon the PCB **270** such that the rear or bottom side **282** of the PCB cover **280** is adjacent or in close proximity to the front or top side **271** of the PCB **270**.

As shown in FIGS. 4, 8, 9, 10, 14, 15 and 17, the shaft assembly **140** includes the shaft member **150**, the shaft protection member **160**, and, preferably, the locking mechanism **159**.

As shown in FIGS. 4, 8, 14, 18A and 18B, the shaft member **150** includes a base **152** and a cylindrical body **154** extending upwardly from the base **152**. The cylindrical body **154** has a first end **156** and a second end **158**. As best shown

US 10,215,177 B2

7

in FIG. 4, the shaft member 150 and shaft protection member 160 are secured, attached, fixed or mounted within the housing 181, preferably in a central location of the base 182 of the housing 181, of the jet assembly 180,180' via the base 152 of the shaft member 150 being secured, attached, fixed or mounted to the base 182 of the housing 181. The shaft member 150 is preferably made or manufactured of steel or a metal material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft member 150. Also, the shaft member 150 is preferably made or manufactured as a single piece. It is obvious to one of ordinary skill in the art that the shaft member 150 may be made or manufactured as multiple pieces.

The shaft protection member 160 includes a base 162, preferably a ring-like base, and a cylindrical body 164 extending upwardly from the ring-like base 162. The cylindrical body 164 has a first end 166, a second end 168, and a cavity 169 extending from the first end 166 to the second end 168. As shown in FIG. 8, the cavity 169 is dimensioned and configured for receiving the cylindrical body 154 of the shaft member 150. The shaft protection member 160 is preferably made or manufactured of a hard material, such as ceramic or a ceramic-type material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft protection member 160. Also, the shaft protection member 160 is preferably polished or super smooth on its outer surface. Further, the shaft protection member 160 is preferably made or manufactured as two pieces. It is obvious to one of ordinary skill in the art that the shaft protection member 160 may be made or manufactured as a single piece.

The locking mechanism 159 secures the shaft protection member 160 within the housing 181 of the jet assembly 180,180'. The locking mechanism 159 may be a locking nut that, when in use, is secured onto the second end 158 of the cylindrical body 154 of the shaft member 150.

As shown in FIGS. 4, 14 and 15, the impeller 170, preferably a magnetic impeller 170 and more preferably a planar magnetic impeller 170, has an outer diameter and a "disc-like" configuration or shape, and includes a front side 172, a rear side 174, a sidewall 176, a circular array of arm members 178 positioned on the front side 172, and the centrally-disposed cavity 179 dimensioned and configured for receiving the outer bearing member 120, inner bearing member 130, shaft member 150, and shaft protection member 160. The centrally-disposed cavity 179 preferably extends from the front side 172 through to the rear side 174. The magnetic impeller 170 is configured to rotate about the shaft member 150 and shaft protection member 160 and to rotate within the impeller-receiving chamber 184. Preferably, the magnetic impeller 170 is formed in whole or in part of a magnetic pole array 177 that, as discussed below, interacts with magnetic pole array 210 of the motor assembly 200 to rotate the magnetic impeller 170 about the shaft member 150 and shaft protection member 160 such that rotation of the magnetic impeller 170 causes the fluid to flow into the inlet aperture 185 and out the outlet aperture 186. As a non-limiting example and as shown in FIG. 22, the magnetic impeller 170 may contain a magnetic plate 171 within an exterior made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that the magnetic impeller 170 may be other types of magnetic impellers that is known in the art.

As best shown in FIGS. 18A and 18B, the motor assembly 200 includes a motor 202, a magnetic pole array 210 such that the motor 202 is configured to drive the magnetic pole

8

array 210, a mounting housing member 250, a gasket 265, a motor shaft member 208 that is coupled to the magnetic pole array 210, and a plurality of screws with wing nuts 258 to support the pump mounting. The mounting housing member 250 and gasket 265 preferably enclose all or a substantial portion of the magnetic pole array 210, and help to keep fluids and/or substances away from the motor 202 and magnetic pole array 210 so that contamination and/or damage is reduced or prevented. The magnetic pole array 210 is formed of magnetic material and/or is magnetized in order to generate a magnetic field 212. As shown in FIG. 18A, the motor shaft member 208 preferably does not extend through the mounting housing member 250. Alternatively, as shown in FIG. 18B, the motor shaft member 208 extends through the mounting housing member 250.

In that regard, the motor assembly 200 may include and/or be coupled to a power source 400 that enables rotation of the motor shaft member 208 and magnetic impeller 170. Upon operation of the motor assembly 200, the motor shaft member 208 is rotated such that the magnetic field 212 generated by the magnetic pole array 210 moves or fluctuates in accordance with the rotation of the magnetic pole array 210.

Furthermore, the motor assembly 200 may further include an air channel (not shown), or air channel member (not shown). In that regard, the air channel includes an inlet (not shown) and outlet (not shown). The air channel, in part, enables the jet assembly 180,180' to produce a jet stream of fluid that includes an air mixture.

As best shown in FIGS. 1-5, the mounting housing member 250 helps to secure, attach or couple the jet assembly 180 and motor assembly 200 together, or at least in proximity of one another, such that the jet assembly 180 and motor assembly 200 are in operative communication with one another. The mounting housing member 250 includes a front (or top) side or surface 251, a rear (or bottom) side or surface 252, the sensor-receiving cavity 253 located about the periphery of the front (or top) side 251, a plurality of engagement holes or ports 255, a plurality of mounting legs 256 extending rearwardly (or downwardly) from the rear (or bottom) side 252, and at least one wing nut 258. Preferably, the front (or top) side 251 is generally flat or has a generally flat, centrally-located section 257 that allows for a liner 290 to be positioned behind (or below) the base 182 of the jet assembly housing 181 and in front of (or above) the front or top side 251 of the mounting housing member 250 and motor assembly 200, as shown in FIGS. 3A-5. Preferably, the generally flat section is at least 10% of the front (or top) side 251 for accommodating a liner 290 being positioned between the base 182 of the jet assembly housing 181 and the front (or top) side 251 of the mounting housing member 250. The sensor-receiving cavity 253 is dimensioned and configured for receiving the contactless, fluid sensor or sensor circuit board 241, and preferably has a hole or opening 254. Each of the plurality of engagement holes or ports 255 is dimensioned and configured for receiving the corresponding knob 299 that extends rearwardly or downwardly from the corresponding feet extension 198 of the base 182 of the jet assembly housing 181. The securement, attachment or engagement of the knobs 299 of the plurality of feet extensions 198 to or inside the plurality of engagement holes or ports 255 of the mounting housing member 250 prevents the rotation of the base 182 and front or top cover 183 of the jet assembly housing 181 when the fluid pump 10,300 is in operation, and thus form the jet assembly rotation locking mechanism. Each of the plurality of mounting legs 256 has a first end 259, a second end 260, and a

US 10,215,177 B2

9

hollow channel **261** extending from the first end **259** toward the second end **260**. Each hollow channel **261** is dimensioned and configured for receiving a corresponding screw (not shown) of a plurality of screws when the motor assembly **200** is to be secured to the mounting housing member **250**. Preferably, the wing nut **258** rotates to extend out to provide a lock for the securement or installation of the mounting housing member **250** to the setting SET, such as, but not limited to, a sidewall of a basin or spa. The plurality of screws and wing nut **258** secure or attach the mounting housing member **250** to the setting SET when the user screws or tightens the screws into the hollow channel **261** of the mounting legs **256** and rotates the wing nut **258**. The tightening of the the screws into the hollow channel **261** of the mounting legs **256** and rotation of the wing nut **258** causes pressure to be applied to the gasket or seal **265** such that a strong seal will form between the gasket or seal **265** and contact surface of the setting SET. The mounting housing member **250** may be made or manufactured of plastic, hard plastic, and/or any other suitable material known to one of ordinary skill in the art. Preferably, the mounting housing member **250** is made or manufactured of a plastic material to allow for magnetic field penetration from the motor assembly **200**, without any, or with minimal, magnetic field loss. This allows for a magnet or magnets of smaller size, in comparison to a magnet or magnets needed when the mounting housing member **250** is made or manufactured of a non-plastic material, to be used, and, thus, reducing cost for magnets.

As shown in FIG. 2, the gasket or seal **265**, preferably a ring-shaped or ring-type gasket, acts or serves as a fluid or water seal to prevent fluid or water from getting past the contact surface of the setting SET and making contact with the motor assembly **200** during use of the fluid pump **10**. As shown in FIGS. 3A and 3B, the gasket **265** is secured to and positioned below (or behind) and adjacent to the rear or bottom side **252** of the mounting housing member **250** and above (or in front of) and adjacent to the contact surface of the setting SET. Preferably, the gasket **265** is made or manufactured of a rubber material.

As a non-limiting example and as best shown in FIGS. 2, 4 and 6, the contactless, fluid sensor assembly **240** includes a contactless, fluid sensor or sensor circuit board **241**, a sensor cover **244**, and a sensor output data cable or cable connector **245**.

The contactless, fluid sensor **241** is secured, attached, fixed or mounted to the sensor-receiving cavity **253** of the mounting housing member **250**. Preferably, the contactless, fluid sensor **241** is a contactless, capacitive fluid sensor **241**. It is obvious to one of ordinary skill in the art that the contactless, fluid sensor **241** can be secured, attached, fixed or mounted to any position on the other components of the fluid pump **10**, such as, but not limited to, the mounting housing member **250** (shown in FIG. 3A), or even be positioned at a location away from the fluid pump **10** (shown in FIG. 3B), that allows the contactless, fluid sensor **241** to be in operative communication with the other components of the fluid pump **10** whereby the contactless, fluid sensor **241** is effective, especially when a liner **290** is being used in or with the setting SET, in capacitive sensing of fluid or water level within the setting SET such that the amount or volume of fluid or water can be controlled. The contactless, fluid sensor **241** preferably includes a plurality of connections **242** for data wiring and an electronic circuit **243** for capacitive sensing of fluid or water level within the setting SET such that the amount or volume of fluid or water within the setting SET can be controlled when a liner **290** is being used

10

within the setting SET. When in use or operation, a liner **290** is positioned behind the base **182** of the jet assembly housing **181** and in front of the contactless, fluid sensor **241** such that the liner **290** prevents the fluid within the setting SET from making contact with the contactless, fluid sensor **241**.

The sensor cover **244** is secured, attached, fixed or mounted to the contactless, fluid sensor **241**, and provides protection for the contactless, fluid sensor **241** against fluid or water, chemicals, substances, etc. that are present in the setting SET. Preferably, the sensor cover **244** is dimensioned and configured to cover all or substantially all of the contactless, fluid sensor **241**. Preferably, the sensor cover **244** is made or manufactured of a non-metal material.

The sensor output data cable or cable connector **245** operatively connects with, or is in operative communication with, the plurality of connections **242** for data wiring of the contactless, fluid sensor **241** through the hole or opening **254** of the sensor-receiving cavity **253**.

As a non-limiting example and as best shown in FIGS. 3A and 3B, the liner **290**, preferably a disposable liner **290**, may be included with the fluid pump **10** or may be provided by an operator or user of the setting SET. The liner **290** is positioned between the base **182** of the jet assembly housing **181** and the mounting housing member **250**, with the contactless, fluid sensor **241** being secured, attached, fixed or mounted to the mounting housing member **250**, such that the fluid or water, chemicals, substances, etc. that are present in the setting SET do not make contact with the contactless, fluid sensor **241**. The liner **290** helps to provide proper or adequate hygiene for customers or users. Preferably, the disposable liner **290** is made or manufactured of a plastic material or any other material known to one of ordinary skill in the art. If the liner **290** is not a disposable version, then it is preferred that the liner **290** is made or manufactured of a material that is easily washed or cleaned, or any other material known to one of ordinary skill in the art.

As shown in FIGS. 19 and 20, the power source **400** provides power to the fluid pump **10,300**, and preferably provides power to the motor **202** of the motor assembly **200** of the fluid pump **10,300** to drive the impeller **170**. As a non-limiting example, the power source **400** may be AC power input, at least one battery, or any power source known to one of ordinary skill in the art. As shown in FIGS. 19 and 20, the motor **202** may be connected to the power source **400** via the control box **420** of the control apparatus **410**.

As shown in FIGS. 19 and 20, the control apparatus **410** preferably includes the control box **420** and a control keypad or device **430**. The control box **420** preferably includes at least one inlet **422** for being in operative communication with the power source **400**, and multiple outlets **424** for being in operative communication with the fluid pump **10,300** and control keypad or device **430**. The control keypad or device **430** preferably acts as a remote control device to be able to turn the fluid pump **10,300** on and off, to adjust how much fluid the fluid or water valve should allow to be added into and/or to be removed or drained from the setting SET, etc. In addition, it is preferred that the control keypad or device **430** is operable to control at least one of the intensity, color, illumination sequencing, and any combination thereof for the array of LED light members **275**.

FIG. 21 shows a schematic block diagram of an embodiment of controlling fluid or water level in a setting via the use of a fluid pump **10,300** having a contactless, fluid sensor **241** according to the present invention, showing the relationships or associations of various components, such as the control keypad or device **430** being in operative connection

US 10,215,177 B2

11

or communication with the fluid pump 10,300, the control box 420, a fluid valve, and the power source 400.

As best shown in FIGS. 8-14, the bearing and shaft assembly 100 is comprised of a bearing assembly 110 comprising at least an outer bearing member 120 and an inner bearing member 130, and a shaft assembly 140 comprising a shaft member 150, a shaft protection member 160, and a locking mechanism 159.

As shown in FIGS. 11-14, the outer bearing member 120 and inner bearing member 130 perform as a bearing. The inner bearing member 130 absorbs vibration and noise when in use with other components of the jet assembly 180,180'.

The outer bearing member 120 includes a base 122, preferably a ring-like base, and a cylindrical body 124 extending upwardly from the ring-like base 122. The ring-like base 122 has a predetermined thickness. The cylindrical body 124 has a first end 126, a second end 128, and a cavity 129 extending from the first end 126 to the second end 128. As shown in FIGS. 11-14, the cavity 129 is dimensioned and configured for receiving the inner bearing member 130. Preferably, when in use, the outer bearing member 120 and inner bearing member 130 are closely or tightly positioned relative to one another such that they form an effective seal. As shown in FIGS. 13 and 14, the outer bearing member 120 is dimensioned and configured for fitting, preferably closely or tightly fitting, within a centrally-disposed cavity 179 of the impeller 170, preferably a magnetic impeller and more preferably a planar magnetic impeller, of the jet assembly 180,180'. Preferably and as best shown in FIG. 13, the ring-like base 122 of the outer bearing member 120 and first end 136 of the cylindrical body 134 of the inner bearing member 130 are substantially flush with the rear side 174 of the magnetic impeller 170 when the outer bearing member 120 and inner bearing member 130 are positioned within the centrally-disposed cavity 179 of the magnetic impeller 170. Preferably, the centrally-disposed cavity 179 of the magnetic impeller 170 is dimensioned and configured for effectively receiving the bearing assembly 110 prior to use, and also for effectively retaining the bearing assembly 110 when in use. The outer bearing member 120 is preferably made or manufactured of a plastic material or engineered plastics. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the outer bearing member 120.

The inner bearing member 130 includes cylindrical body 134 having first end 136, a second end 138, and a cavity 139 extending from the first end 136 to the second end 138. As shown in FIGS. 11-14, the cavity 139 is dimensioned and configured for receiving the shaft member 150 and shaft protection member 160 of the shaft assembly 140. The inner bearing member 130 is preferably made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the inner bearing member 130.

As shown in FIGS. 8-10 and 14, the shaft member 150 includes a base 152 and a cylindrical body 154 extending upwardly from the base 152. The cylindrical body 154 has a first end 156 and a second end 158. As best shown in FIG. 10, the shaft member 150 and shaft protection member 160 are secured, attached, fixed or mounted within the housing 181, preferably in a central location upon the inner surface 191 of the base 182 of the housing 181, of the jet assembly 180,180' via the base 152 of the shaft member 150 being secured, attached, fixed or mounted to the base 182 of the housing 181. The cylindrical body 154 has a first end 156 and a second end 158. The shaft member 150 is preferably

12

made or manufactured of steel or a metal material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft member 150. Also, the shaft member 150 is preferably made or manufactured as a single piece. It is obvious to one of ordinary skill in the art that the shaft member 150 may be made or manufactured as multiple pieces.

The shaft protection member 160 includes a base 162, preferably a ring-like base, and a cylindrical body 164 extending upwardly from the ring-like base 162. The cylindrical body 164 has a first end 166, a second end 168, and a cavity 169 extending from the first end 166 to the second end 168. As shown in FIG. 8, the cavity 169 is dimensioned and configured for receiving the cylindrical body 154 of the shaft member 150. The shaft protection member 160 is preferably made or manufactured of a hard material, such as ceramic or a ceramic-type material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft protection member 160. Also, the shaft protection member 160 is preferably polished or super smooth on its outer surface. Further, the shaft protection member 160 is preferably made or manufactured as two pieces. It is obvious to one of ordinary skill in the art that the shaft protection member 160 may be made or manufactured as a single piece.

The locking mechanism 159 secures the shaft protection member 160 within the housing 181 of the jet assembly 180,180'. The locking mechanism 159 may be a locking nut that, when in use, is secured onto the second end 158 of the cylindrical body 154 of the shaft member 150.

In addition, when the magnetic coupling-type pump 300 is assembled as shown in FIGS. 17, 18A and 18B, the jet assembly 180' is positioned adjacent or in close proximity to the mounting housing member 250 and motor assembly 200. The jet assembly 180' is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180' is positioned adjacent or in close proximity to the mounting housing member 250. The jet assembly 180' and mounting housing member 250 can be secured or coupled to one another by any method and/or device known to one of ordinary skill in the art.

In operation or use and as shown in FIGS. 5 and 10-14, the base 152 of the shaft member 150 and base 162 of the shaft protection member 160 may be secured, attached, fixed or mounted preferably in a central location upon the inner surface 191 of the base 182 of the housing 181 of the jet assembly 180,180' of the magnetic coupling-type pump 10,300. The bearing assembly 110 may then be positioned in the cavity 179 of the magnetic impeller 170, which can then be positioned within the impeller-receiving chamber 184 of the housing 181 of the jet assembly 180,180'. The locking mechanism or nut 159 can then be secured to the second end 158 of the cylindrical body 154 of the shaft member 150 to align the magnetic impeller 170 within the housing 181 of the jet assembly 180,180'.

Preferably when in operation or use and as shown in FIGS. 17, 18A and 18B, the jet assembly 180,180' is positioned adjacent or in close proximity to the motor assembly 200 when the magnetic coupling-type pump 10,300 is fully assembled. In that regard, the jet assembly 180,180' is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180,180' is positioned adjacent or in close proximity to the motor assembly 200. Specifically, the magnetic pole array 210 of the motor assembly 200 and the magnetic pole array 177 of the jet assembly 180,180' magnetically couple together the motor assembly 200 and the jet assembly 180,180'.

US 10,215,177 B2

13

Moreover, during operation of the fluid pump **300** and motor assembly **200** as shown in FIGS. **18A** and **18B**, the shaft member **150** of the shaft assembly **140** is stationary while the motor shaft member **208** of the motor assembly **200** is rotated such that the magnetic field **212** generated by the magnetic pole array **210** of the motor assembly **200** moves or fluctuates in accordance with the rotation of the magnetic pole array **210** of the motor assembly **200**. This moving or fluctuating magnetic field **212** moves and/or causes rotation of magnetic pole array **177** of the magnetic impeller **170**. Additionally, as discussed in greater detail below, rotation of the magnetic impeller **170** results in fluid being drawn towards the magnetic impeller **170** through inlet apertures **185** and such fluid to be propelled out of the jet assembly **180,180'** through the outlet aperture **186**.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid to a setting using a fluid pump **10,300** having a contactless, fluid sensor **241** and the fluid pump being for use with a liner **290**, the method comprising the steps of:

securing a fluid pump **10,300** to a setting SET, wherein the fluid pump **10,300** comprises a motor assembly **200**

comprising a motor **202**, a jet assembly **180,180'** secured to or about the motor assembly **200**, and a contactless, fluid sensor assembly **240** comprising a contactless, fluid sensor **241**,

wherein the jet assembly **180,180'** is in operative communication with the motor **202**,

wherein the jet assembly **180,180'** comprises a jet assembly housing **181**, a shaft member assembly, and an impeller **170** having an outer diameter,

wherein the jet assembly housing **181** comprises a base **182**, a top cover **183**, an impeller-receiving chamber **184** defined by the base **182** and the top cover **183**, at least one inlet aperture **185**, and at least one outlet aperture **186**,

wherein the base **182** of the jet assembly housing **181** comprises an inner surface **191** and an outer surface **192**,

wherein the top cover **183** of the jet assembly housing **181** comprises an inner surface **231** and an outer surface **232**,

wherein the shaft member assembly comprises a shaft member **150** secured to the base **182** of the jet assembly housing **181**,

wherein the at least one inlet aperture **185** is disposed about the housing **181** and is dimensioned and configured to allow a fluid to enter the jet assembly housing **181** when in operation,

wherein the at least one outlet aperture **186** is disposed about the housing **181** and is dimensioned and configured to allow the fluid to exit from the jet assembly housing **181** and enter a setting SET when in operation,

wherein the impeller-receiving chamber **184** is dimensioned and configured to receive the impeller **170** and to allow the impeller **170** to rotate about the shaft member **150** within the impeller-receiving chamber **184**, and

wherein the impeller **170** is caused by the motor **202** to rotate within the impeller-receiving chamber **184** when in operation, wherein the rotation of the impeller **170** causes a first fluid to enter the jet assembly housing **181** via the at least one inlet aperture **185** and to exit the jet assembly housing **181** via the at least one outlet aperture **186**;

securing a liner **290** to the fluid pump **10,300** (preferably), or the setting SET,

wherein the contactless, fluid sensor **241** is secured at a predetermined location on the fluid pump **10,300** that is rearward of both the jet assembly **180,180'** and the liner **290** being used within the setting SET such that the contactless,

14

fluid sensor **241** does not make contact with a fluid when in operation, wherein the contactless, fluid sensor **241** is able to detect a fluid level in the setting SET such that the amount or volume of fluid within the setting SET can be controlled;

causing rotation of the impeller **170** about the shaft member assembly and positioned within the impeller-receiving chamber **184** defined by the housing **181** of the jet assembly **180,180'**;

allowing the fluid to enter the housing **181** of the jet assembly **180,180'** through the at least one input aperture **185** disposed about the housing **181** of the jet assembly **180,180'**;

disturbing the entered fluid with the rotating impeller **170**; and

dispensing the entered fluid through the at least one output aperture **186** disposed about the housing **181**.

In addition, the method above may further include: wherein the shaft member assembly is a bearing and shaft assembly **100** that is comprised of a bearing assembly **110** comprising an outer bearing member **120** and an inner bearing member **130**, and a shaft assembly **140** comprising a shaft member **150**, a shaft protection member **160**, and a locking mechanism **159**.

Furthermore, the method above may further include:

wherein the outer bearing member **120** further comprises a base **122** comprising a cavity, wherein the cylindrical body **124** of the outer bearing member **120** extends upwardly from the base **122**, wherein the cavity of the base **122** is dimensioned and configured for receiving the inner bearing member **130**,

wherein the shaft member **150** further comprises a base **152**, wherein the cylindrical body **154** of the shaft member **150** extends upwardly from the base **152** of the shaft member **150**, and

wherein the shaft protection member **160** further comprises a base **162** comprising a cavity, wherein the cylindrical body **164** of the shaft protection member **160** extends upwardly from the base **162** of the shaft protection member **160**, and wherein the cavity of said base **162** is dimensioned and configured for receiving the shaft member **150**.

Additionally, the method above may further include: wherein the jet assembly **180,180'** is adapted for being secured to a fluid pump **10,300**, such as a magnetic coupling pump **10,300** and the like, wherein the impeller **170** is a magnetic impeller **170** comprising a magnetic pole array **177**, wherein a motor assembly **200** of the magnetic coupling pump **300** comprises a motor **202**, a magnetic pole array **210**, and a motor shaft member **208** adapted for being rotated such that a magnetic field **212** generated by the magnetic pole array **210** of the motor assembly **200** moves or fluctuates in accordance with the rotation of the magnetic pole array **210** of the motor assembly **200**, wherein the motor **202** drives the magnetic pole array **210** of the motor assembly **200**, wherein the magnetic field **212** moves and/or causes rotation of the magnetic pole array **177** of the magnetic impeller **170**, and wherein rotation of the magnetic impeller **170** results in the fluid being drawn towards the magnetic impeller **170** through the at least one inlet aperture **185** and the fluid to be propelled out of the jet assembly **180,180'** through the at least one outlet aperture **186**.

Further, the method above may further include:

wherein the outer bearing member **120** is manufactured of a plastic material or engineered plastics, wherein the inner bearing member **130** is manufactured of rubber or a rubber-like material, wherein the shaft member **150** is manufactured of steel or a metal material, and wherein the shaft protection member **160** is manufactured of a hard material.

US 10,215,177 B2

15

Furthermore, the method above may further include any of the parts, steps and/or details that have been described in the above paragraphs with regard to the improved bearing and shaft assembly **100**, jet assemblies **180,180'**, and fluid pumps **10,300**, such as magnetic coupling pumps **10,300** and the like.

It is to be understood that the present invention is not limited to the embodiments described above or as shown in the attached figures, but encompasses any and all embodiments within the spirit of the invention.

What is claimed is:

1. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:
 a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;
 a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,
 wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,
 wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive said bearing assembly,
 wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,
 wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing,
 wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly,
 wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,
 wherein said impeller-receiving chamber is defined by said base and said top cover when said base and said top cover are secured to one another,
 wherein impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller, to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation, and to perform as a pressure chamber without any fluid guiding channel on said base of said jet assembly housing in propelling a stream of the fluid through each of said at least one outlet aperture to the setting or work environment in the manicure and pedicure industries,
 wherein said bearing assembly comprises at least one bearing member,
 wherein said shaft assembly comprises a shaft member, and
 wherein said shaft member extends through said inner surface of said jet assembly housing; and
 a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,
 wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.

2. The fluid pump according to claim 1, wherein said impeller housing further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-

16

aperture of said impeller housing is dimensioned and configured for receiving said shaft member.

3. The fluid pump according to claim 1, wherein, during operation, said magnetic impeller rotates around said shaft member that is secured within said et assembly housing, and wherein said shaft member provides an axis of rotation for said magnetic impeller.

4. The fluid pump according to claim 3, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.

5. The fluid pump according to claim 2, wherein said through-aperture is a central, through-aperture.

6. The fluid pump according to claim 1, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.

7. The fluid pump according to claim 1, wherein said shaft member is manufactured of steel or a metal material.

8. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:

a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;

a jet assembly comprising a shaft assembly, a jet assembly housing and a magnetic impeller,

wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,

wherein said jet assembly housing comprising an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another, and

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,

wherein said shaft assembly comprises a shaft member, wherein said shaft member extends through said inner surface of said jet assembly housing, and

wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive a bearing,

wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,

wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing, and

wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly;

a mounting housing member comprising a too surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member; and

a liner dimensioned and configured for being positioned between a bottom surface of said base of said jet assembly housing and said top surface of said mounting housing member.

9. The fluid pump according to claim 8, wherein said impeller housing of said magnetic impeller further com-

US 10,215,177 B2

17

prises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.

10. The fluid pump according to claim 8, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.

11. The fluid pump according to claim 8, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.

12. The fluid pump according to claim 9, wherein said through-aperture is a central, through-aperture.

13. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:

a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;

a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,

wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,

wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another,

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,

wherein said bearing assembly comprises at least one bearing member,

wherein said shaft assembly comprises said shaft member and a shaft protection member,

wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing,

wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive said bearing assembly,

wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,

wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing, and

wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly; and

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.

14. The fluid pump according to claim 1, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein

18

said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.

15. The fluid pump according to claim 13, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.

16. The fluid pump according to claim 13, wherein each of said jet assembly housing and said mounting housing member further comprises at least one locking mechanism member, and wherein said at least one locking mechanism member of said jet assembly housing and said at least one locking mechanism member of said mounting housing member cooperate with one another such that a locking mechanism is formed to prevent rotation of said jet assembly housing during operation.

17. The fluid pump according to claim 16, wherein said at least one locking mechanism member of said jet assembly housing is at least one locking mechanism knob positioned on said outer surface of said base of said jet assembly housing, wherein said at least one locking mechanism member of said mounting housing member is at least one locking mechanism aperture positioned on said top surface of said mounting housing member, and wherein said at least one locking mechanism aperture is dimensioned and configured for receiving said at least one locking mechanism knob such that the locking mechanism is formed when said at least one locking mechanism knob and said at least one locking mechanism aperture are secured with one another.

18. The fluid pump according to claim 17, wherein said locking mechanism is a detachable locking mechanism.

19. The fluid pump according to claim 16, wherein said locking mechanism is a detachable locking mechanism.

20. The fluid pump according to claim 13, wherein said shaft member is secured within said jet assembly housing,

wherein said shaft member provides an axis of rotation for said magnetic impeller, and

wherein, during operation, said magnetic impeller rotates around said shaft member.

21. The fluid pump according to claim 20, wherein said shaft member is secured generally centrally within said base of said jet assembly housing.

22. The fluid pump according to claim 20, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.

23. The fluid pump according to claim 13, wherein said top surface of said mounting housing member comprises a generally flat section that is at least 10% of said top surface for accommodating a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.

24. The fluid pump according to claim 23, where said flat section is located at a center of said mounting housing member.

25. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:

a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;

a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller,

wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,

wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an

US 10,215,177 B2

19

impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,
 wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another, 5
 wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation, 10
 wherein said magnetic impeller comprising an impeller housing and a magnetic plate dimensioned and configured for receiving said bearing assembly,
 wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly, 15
 wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,
 wherein, when said base and said top cover are secured to one another, a first position being defined at a highest point of said arm member of said magnetic impeller, a second position being defined at a lowest positioned inlet aperture of said at least one inlet aperture on said inner surface of said top cover, said first position and said second position being spaced less than half of said outer diameter of said impeller, 20
 wherein said bearing assembly comprises at least one bearing member,
 wherein said shaft assembly comprises said shaft member and a shaft protection member, 25
 wherein said shaft member extends through an inner surface of said jet assembly housing, 30

20

wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing; and
 a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,
 wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.
26. The fluid pump according to claim **25**, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.
27. The fluid pump according to claim **26**, wherein said through-aperture is a central, through-aperture.
28. The fluid pump according to claim **25**, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.
29. The fluid pump according to claim **25**, wherein said mounting housing member further comprises at least one mounting leg.
30. The fluid pump according to claim **29**, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.

* * * * *

LURACO’S FIRST AMENDED INFRINGEMENT CONTENTIONS RE:
US10215177

1. Defendant/Counter Plaintiff Luraco Health & Beauty, LLC (“Luraco”), hereby provide its first amended infringement contentions against Plaintiffs/Counter Defendants Lexor Inc., Lexor Manufacturing LLC (“Lexor Mfg.”), and Ecojet Inc. (“Ecojet”). .
2. Luraco alleges that Lexor, Inc, and Lexor Mfg sell products made by Lexor Mfg. and Ecojet.
3. The EcoJet II Magnetic Drive (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Whirlpool Magnetic Jet System (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Magnetic Wet-End (aka the “Ecojet Universal 3.5 Shafted”), Ecojet MD 3.0 Shafted, and Ecojet MD 3.0 Shafted (with motor and mounting housing) are manufactured and sold by Lexor Manufacturing, LLC, which also is believed to licenses use of its patents to Ecojet.
4. Faithful snapshots of the infringing products are shown below:



Image from Exhibit 15 of Second Amended Answer

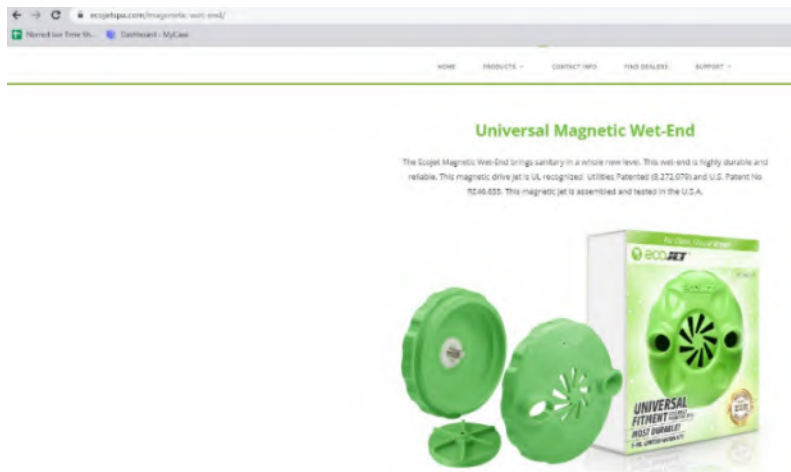


Image From Exhibit 15 of Second Amended Answer



ECOJET MD MAGNETIC JET INSTALLATION GUIDE

WARNING: PLEASE READ AND FOLLOW SAFETY INSTRUCTIONS BEFORE USING THE EQUIPMENT. ALWAYS UNPLUG THE EQUIPMENT BEFORE SERVICING TO REDUCE THE RISK OF ELECTRIC SHOCK AND/OR PERSONAL INJURY.

NOTE: Ecojet MD magnetic motor & components are assembled in alignment as illustrated below. Please follow step-by-step instructions. (Rev. 1.2)

Ecojet MD package contents:

- 1 Ecojet MD Magnetic Motor (Part#: EMD-1001)
- 2 Motor Cap Lock-Nut (Part#: EMD-2108)
- 3 Universal Adapter (1pc.) (Part#: EMD-2107)
- 4 Motor Housing Gasket (Part#: EMD-2106)
- 5 Motor Housing (Part#: EMD-2105)
- 6 Impeller Housing (Part#: EMD-2104)
- 7 Magnetic Impeller (Part#: EMD-2103)
- 8 Ecojet Cap Cover (Part#: EMD-2101)
- 9 AC Power Cord (Part#: EMD-2109)



Image from Exhibit 11 of Second Amended Answer

5. The charts showing infringement of US 10,215,177 are attached as Exhibit 6a. Luraco may supplement or amend this set of contentions based on further analysis.

US 10,215,177 Claim Language	Evidence of Infringement of Ecojet MD 3.0 (Shafted)
<p>1. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the LEXOR website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;</p>	<p>As shown in Fig. 7(1-3) the motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.</p>
<p>b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,</p>	<p>As shown in Fig. 8(1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.</p>
<p>c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,</p>	<p>As shown in Fig. 6(3), 7(1-4), 8(6-7), 9(1-3), 15(7), and 16(4) the said magnetic plate and said magnetic impeller rotate on a same axis during operation.</p>
<p>d) wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive said bearing assembly,</p>	<p>As shown in Fig. 14(3, 5 and 8) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive the bearing assembly.</p>
<p>e) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,</p>	<p>As shown in Fig. 14(1-4 and 6-7) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.</p>

f) wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing,	As shown in Fig. 14(3 and 5) the magnetic impeller is fully enclosed within the impeller housing.
g) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly,	As shown in Fig. 12(1 and 5), 13(4-6), and 14(8) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.
h) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
i) wherein said impeller-receiving chamber is defined by said base and said top cover when said base and said top cover are secured to one another,	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by said base and said top cover when said base and said top cover are secured to one another.
j) wherein impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller, to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation, and to perform as a pressure chamber without any fluid guiding channel on said base of said jet assembly housing in propelling a stream of the fluid through each of said at least one outlet aperture to the setting or work environment in the manicure and pedicure industries,	As shown in Fig. 15(1-3, 6-7, and 10) and 16(1-6) the impeller receiving chamber is dimensioned and configured to receive the magnetic impeller, to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation, and to perform as a pressure chamber without any fluid guiding channel on the base of jet assembly housing in propelling a stream of fluid through each outlet aperture to the setting or work environment in the manicure and pedicure industries.

k) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 12(5), 13(5-7), and 14(8) the bearing assembly comprises at least one bearing member.
l) wherein said shaft assembly comprises a shaft member, and	As shown in Fig. 12(2-3) and 13(1 and 3) the shaft assembly comprises a shaft member.
m) wherein said shaft member extends through said inner surface of said jet assembly housing; and	As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.
n) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
o) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while motor assembly is secured to the bottom surface of the mounting housing member.
2. The fluid pump according to claim 1, wherein said impeller housing further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.	As shown in Fig. 12(1, 3, and 6) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.

3. The fluid pump according to claim 1, wherein, during operation, said magnetic impeller rotates around said shaft member that is secured within said jet assembly housing, and wherein said shaft member provides an axis of rotation for said magnetic impeller.	As shown in Fig. 8(6), 9(1) and 12(1, 3, and 6) the magnetic impeller rotates around the shaft member that is secured within the jet assembly housing, and the shaft member provides an axis of rotation for magnetic impeller.
4. The fluid pump according to claim 3, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.	As shown in Fig. 12(3) and 13(3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operation.
5. The fluid pump according to claim 2, wherein said through-aperture is a central, through-aperture.	As shown in Fig. Fig. 12(6) the through-aperture is a central, through-aperture.
6. The fluid pump according to claim 1, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.	As shown in Fig. 16(4-5) the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.
7. The fluid pump according to claim 1, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3) the shaft member is of steel or a metal material.
8. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html . See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html . See Fig 4.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 7(1-3) the motor assembly comprises a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.
b) a jet assembly comprising a shaft assembly, a jet assembly housing and a magnetic impeller,	As shown in Fig. (1 and 6) and 12(1-2), the jet assembly comprises a shaft assembly, a jet assembly housing, and a magnetic impeller.
c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 6(3), 7(1-4), 8(6-7), 9(1-3), 15(7), and 16(4) the said magnetic plate and said magnetic impeller rotate on a same axis during operation.

d) wherein said jet assembly housing comprising an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
e) wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another, and	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the top cover of the jet assembly housing when the base and the top cover are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation.
g) wherein said shaft assembly comprises a shaft member,	As shown in Fig. 12(2-3) and 13(1 and 3) the shaft assembly comprises a shaft member.
h) wherein said shaft member extends through said inner surface of said jet assembly housing, and	As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.
i) wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive a bearing,	As shown in Fig. 14(3, 5 and 8) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive a bearing.
j) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,	As shown in Fig. 14(1-4 and 6-7) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.
k) wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing, and	As shown in Fig. 14(3 and 5) the magnetic plate of the magnetic impeller is fully enclosed within the impeller housing.

<p>l) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly;</p>	<p>As shown in Fig. 12(1 and 5), 13(4-6), and 14(8) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.</p>
<p>m) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,</p>	<p>As shown in Fig. 5(2-4) the mounting housing member comprising a top surface, a bottom surface, and a shoulder (where the rubber gasket against to) dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.</p>
<p>n) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member; and</p>	<p>As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while the motor assembly is secured to the bottom surface of the mounting housing member.</p>
<p>o) a liner dimensioned and configured for being positioned between a bottom surface of said base of said jet assembly housing and said top surface of said mounting housing member.</p>	<p>As shown in Fig. 17-18 it is known in the industry that a liner is positioned between the bottom surface of the base of the jet assembly housing and the top surface of the mounting housing member.</p>
<p>9. The fluid pump according to claim 8, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.</p>	<p>As shown in Fig.12(1, 3, and 6) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.</p>
<p>10. The fluid pump according to claim 8, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.</p>	<p>As shown in Fig. 16(4-5) the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.</p>

11. The fluid pump according to claim 8, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.	As shown in Fig. 12(3) and 13(3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member.
12. The fluid pump according to claim 9, wherein said through-aperture is a central, through-aperture.	As shown in Fig. 12(6) the through-aperture is a central, through-aperture.
13. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html . See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html . See Fig 4.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 7(1-3) the motor assembly comprises a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.
b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,	As shown in Fig. (1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.
c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 6(3), 7(1-4), 8(6-7), 9(1-3), 15(7), and 16(4) the said magnetic plate and said magnetic impeller rotate on a same axis during operation.

d) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
e) wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another,	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the top cover of the jet assembly housing when the base and the top cover are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation.
g) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 12(5), 13(5-7), and 14(8), the bearing assembly comprises at least one bearing member.
h) wherein said shaft assembly comprises said shaft member and a shaft protection member,	As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises a shaft member and shaft protection member.
i) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing,	As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member comprises a base and is positioned between the bearing assembly and the base of the jet assembly housing.
j) wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive said bearing assembly,	As shown in 14(3, 5 and 8) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive the bearing assembly.

<p>k) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,</p>	<p>As shown in Fig. 14(1-4 and 6-7) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.</p>
<p>l) wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing, and</p>	<p>As shown in Fig. 14(3 and 5) the magnetic plate of the magnetic impeller is fully enclosed within the impeller housing.</p>
<p>m) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly; and</p>	<p>As shown in Fig. 12(1 and 5), 13(4-6), and 14(8) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.</p>
<p>n) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,</p>	<p>As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.</p>
<p>o) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.</p>	<p>As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while said motor assembly is secured to the bottom surface of the mounting housing member.</p>
<p>14. The fluid pump according to claim 1, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.</p>	<p>As shown in Fig. 12(1, 3, and 6) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.</p>
<p>15. The fluid pump according to claim 13, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.</p>	<p>As shown in Fig. 16(4-5) the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.</p>

<p>16. The fluid pump according to claim 13, wherein each of said jet assembly housing and said mounting housing member further comprises at least one locking mechanism member, and wherein said at least one locking mechanism member of said jet assembly housing and said at least one locking mechanism member of said mounting housing member cooperate with one another such that a locking mechanism is formed to prevent rotation of said jet assembly housing.</p>	<p>As shown in Fig. 10(1-4 and 6) and 11(4) the jet assembly housing and mounting housing member further comprises at least one locking mechanism member, and wherein at least one locking mechanism member of jet assembly housing and at least one locking mechanism member of mounting housing member cooperate with one another such that a locking mechanism is formed to prevent rotation of jet assembly housing during operation.</p>
<p>17. The fluid pump according to claim 16, wherein said at least one locking mechanism member of said jet assembly housing is at least one locking mechanism knob positioned on said outer surface of said base of said jet assembly housing, wherein said at least one locking mechanism member of said mounting housing member is at least one locking mechanism aperture positioned on said top surface of said mounting housing member, and wherein said at least one locking mechanism aperture is dimensioned and configured for receiving said at least one locking mechanism knob such that the locking mechanism is formed when said at least one locking mechanism knob and said at least one locking mechanism aperture are secured with one another.</p>	<p>As shown in Fig. 10(1-4 and 6) and 11(4) at least one locking mechanism member of jet assembly housing is at least one locking mechanism knob positioned on outer surface of base of jet assembly housing, wherein at least one locking mechanism member of mounting housing member is at least one locking mechanism aperture positioned on top surface of said mounting housing member, and wherein at least one locking mechanism aperture is dimensioned and configured for receiving at least one locking mechanism knob such that the locking mechanism is formed when at least one locking mechanism knob and at least one locking mechanism aperture are secured with one another.</p>
<p>18. The fluid pump according to claim 17, wherein said locking mechanism is a detachable locking mechanism.</p>	<p>As shown in Fig. 6(3), 10(1-4 and 6), and 11(4) the locking mechanism is a detachable locking mechanism.</p>
<p>19. The fluid pump according to claim 16, wherein said locking mechanism is a detachable locking mechanism.</p>	<p>As shown in Fig. 6(3), 10(1-4 and 6), and 11(4) the locking mechanism is a detachable locking mechanism.</p>
<p>20. The fluid pump according to claim 13, wherein said shaft member is secured within said jet assembly housing, wherein said shaft member provides an axis of rotation for said magnetic impeller, and wherein, during operation, said magnetic impeller rotates around said shaft member.</p>	<p>As shown in Fig. 8(6), 9(1) and 12(1, 3, and 6) the magnetic impeller rotates around the shaft member that is secured within the assembly housing, and wherein the shaft member provides an axis of rotation for magnetic impeller.</p>
<p>21. The fluid pump according to claim 20, wherein said shaft member is secured generally centrally within said base of said jet assembly housing.</p>	<p>As shown in Fig. 12(3) and 13(3) the shaft member is secured generally centrally within said base of said jet assembly housing.</p>

22. The fluid pump according to claim 20, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.	As shown in Fig. 12(3) and 13(3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operation.
23. The fluid pump according to claim 13, wherein said top surface of said mounting housing member comprises a generally flat section that is at least 10% of said top surface for accommodating a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.	As shown in Fig. 7(4), 8(2), 10(1), and 18 the mounting housing member comprises a generally flat section that is at least 10% of top surface for accommodating a liner being positioned between base of jet assembly housing and top surface of mounting housing member.
24. The fluid pump according to claim 23, where said flat section is located at a center of said mounting housing member.	As shown in Fig. 7(4), 8(2), and 10(1) the flat section is located at the center of the mounting housing member.
25. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html . See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html . See Fig 4.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 7(1-3) the a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to motor shaft.
b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller,	As shown in Fig. (1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.

c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 6(3), 7(1-4), 8(6-7), 9(1-3), 15(7), and 16(4) the said magnetic plate and said magnetic impeller rotate on a same axis during operation.
d) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
e) wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another,	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the top cover of the jet assembly housing when the base and the top cover are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4 the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation.
g) wherein said magnetic impeller comprising an impeller housing and a magnetic plate dimensioned and configured for receiving said bearing assembly,	As shown in Fig. 12(1 and 5), 13(4-6), and 14(3, 5, and 8) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive the bearing assembly.
h) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly,	As shown in Fig. 12(1 and 5), 13(4-6), and 14(8) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.

i) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,	As shown in Fig. 14(1-4 and 6-7) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.
j) wherein, when said base and said top cover are secured to one another, a first position being defined at a highest point of said arm member of said magnetic impeller, a second position being defined at a lowest positioned inlet aperture of said at least one inlet aperture on said inner surface of said top cover, said first position and said second position being spaced less than half of said outer diameter of said impeller,	As shown in Fig. 13(2-10) the base and the top cover are secured to one another, with a first position being defined at a highest point of the arm member of the magnetic impeller, a second position defined at a lowest positioned inlet aperture of at least one inlet aperture on the inner surface of the top cover, the first position and the section position being spaced less than half of the outer diameter of the impeller.
k) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 12(5), 13(5-7), and 14(8) the bearing assembly comprises at least one bearing member.
l) wherein said shaft assembly comprises said shaft member and a shaft protection member,	As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises a shaft member and shaft protection member.
m) wherein said shaft member extends through an inner surface of said jet assembly housing,	As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through an inner surface of the jet assembly housing.
n) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly	As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member comprises a base and is positioned between the bearing assembly and the base of the jet assembly housing.
o) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
p) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while said motor assembly is secured to the bottom surface of the mounting housing member.

<p>26. The fluid pump according to claim 25, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.</p>	<p>As shown in Fig. 12(1, 3, and 6), the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.</p>
<p>27. The fluid pump according to claim 26, wherein said through-aperture is a central, through-aperture.</p>	<p>As shown in Fig. 12(6) the through-aperture is a central, through-aperture.</p>
<p>28. The fluid pump according to claim 25, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.</p>	<p>As shown in Fig. 16(4-5) the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.</p>

Figures for the Ecojet MD 3.0 **(Shafted Model)**

ECO magnetic drive jet

Option - complete set (wet cover + dry motor)



FREE
SHIPPING
continental US only

<https://ecojetspa.com/product/ecojet-md-magnetic-jet-set/>



HOME

PRODUCTS ▾

CONTACT INFO

FIND DEALERS

SUPPORT ▾



Ecojet Magnetic Drive Jet Set (Retail)


\$199.00

Ecojet Magnetic Whirlpool Motor (Design for Pedicure Spa Chair).

The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized, Utilities Patented (8,272,079) and U.S. Patent No RE46,655. This magnetic jet is assembled and tested in the U.S.A.

This kit is design to fit most spa chairs in the market. The Ecojet Magnetic Drive Jet will fit the standard 3 inch diameter cut out

Figure 3



PSDTM
Pedicure Spa & Salon Furniture Wholesaler


HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US F

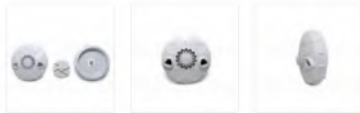
HOME / ECOJET FRONT HOUSING SET

Product Code: Ecojet Front Housing Set

ECOJET FRONT HOUSING SET

[Add to Wishlist](#) [Add to Compare](#)





DETAILS

Ecojet Replacement Magnetic Impeller Housing Set (3pcs. Kit).

The Ecojet Magnetic Impeller Housing set is a direct housing and impeller replacement for the Ecojet Magnetic Drive Jet Set. The set comes with cap cover, magnetic impeller, and the impeller housing.

Ecojet Impeller Housing contents:

Ecojet MD Cap Cover
Ecojet MD Magnetic Impeller
Ecojet MD Impeller Housing

RELATED PRODUCTS


SpaSalon.us wholesale Search products [» advanced search](#)

[PEDICURE CHAIRS](#) [NAIL](#) [HAIR](#) [SPA](#) [DECOR](#) [PARTS](#) [SUPPLIES](#) [PACKAGE DEALS](#) **Hot**

[Home](#) / [Spa Parts](#) / [ECO magnetic jet - old](#)

ECO magnetic jet - old

★★★★★ [7 reviews](#) [Write a review](#)



Option :
- select -

make your selection, price will show

Faster shipping :
- select -

Price in points **€** : 5650 points

[Description](#) [Email](#) [Reviews 7](#) [Shipping & Warranty](#) [Downloads](#) [How to](#) [Video gallery](#)

[Description](#) [Email](#) [Reviews 7](#) [Shipping & Warranty](#) [Downloads](#) [How to](#) [Video gallery](#)

ECO magnetic jet - old

Ecojet Impeller Housing contents:

- Ecojet MD Cap Cover
- Ecojet MD Magnetic Impeller
- Ecojet MD Impeller Housing

Ecojet Replacement Magnetic Whirlpool Motor.

- The Ecojet Replacement Magnetic Whirlpool Motor comes with a two-year warranty. We assemble and test the motor in the U.S.A.
- This motor has an internal cooling system to prevent overheating. This is a direct motor replacement for the Ecojet Magnetic Drive Jet Set.

The Ecojet MD package contents:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter (2pcs.)
- Motor Housing Gasket
- Motor Housing (3.5 inches)
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card (2pcs.)

2. Mounting Housing (configured to mount to wall of pedicure basin)

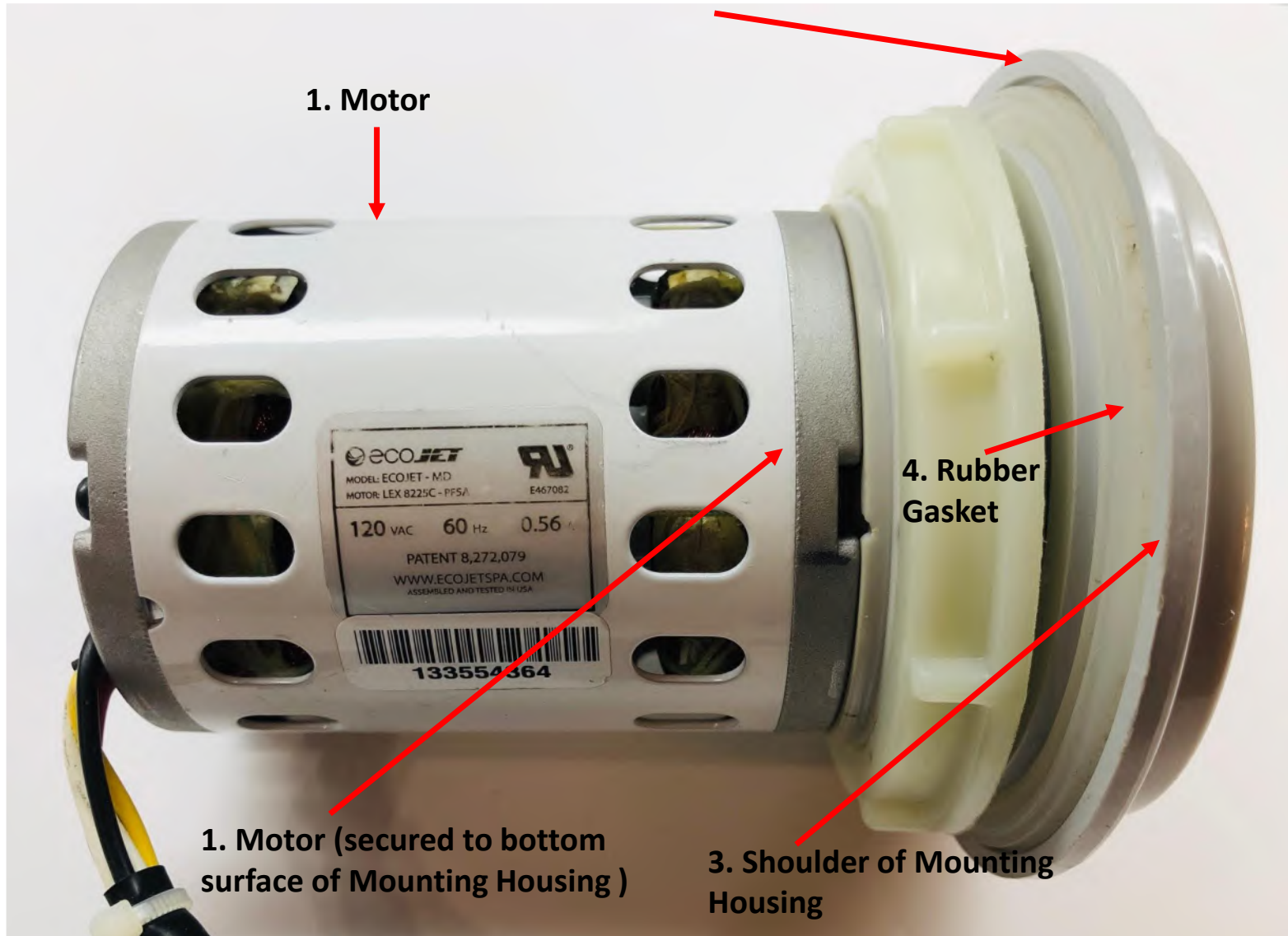


Figure 6

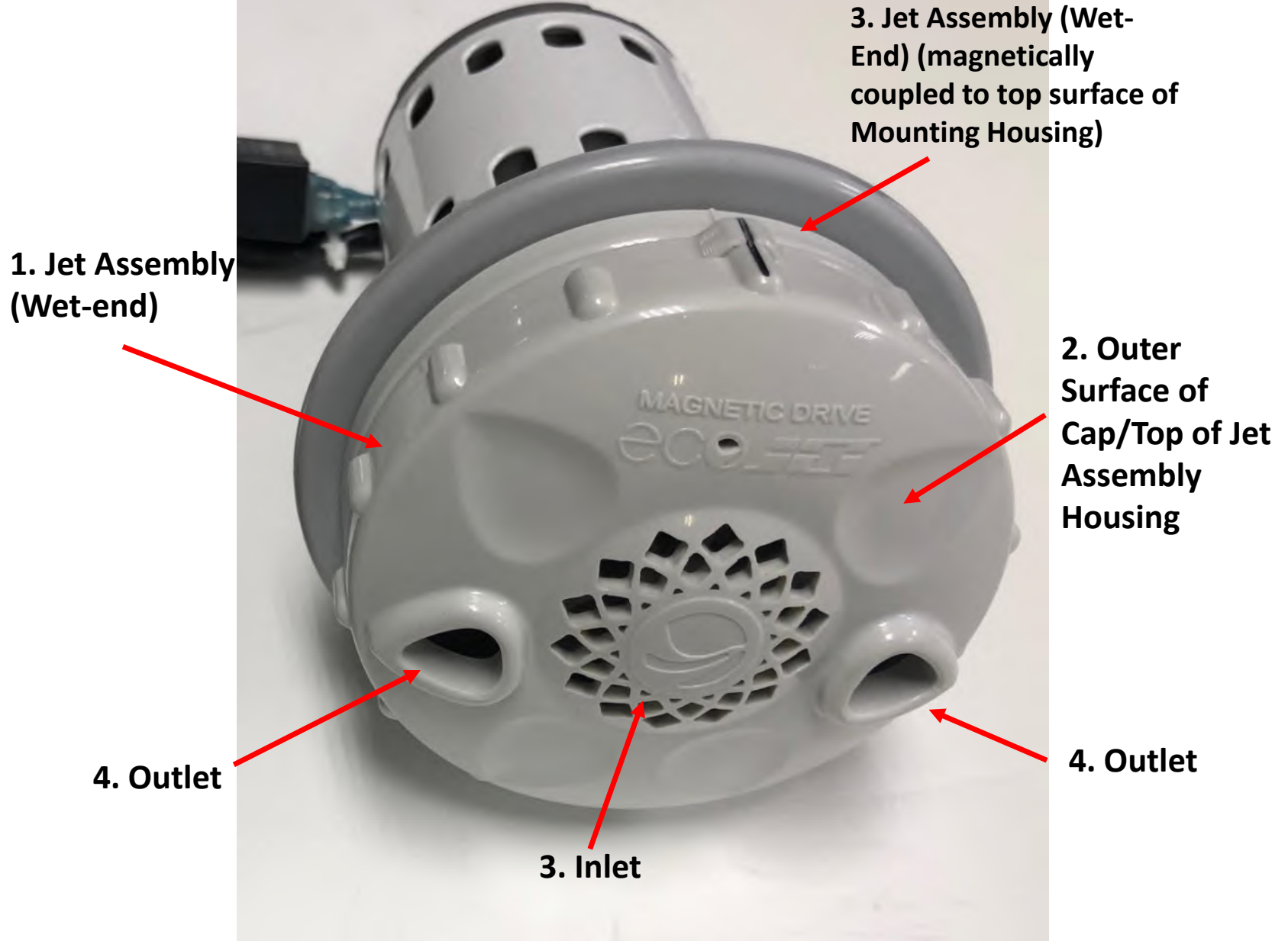


Figure 7

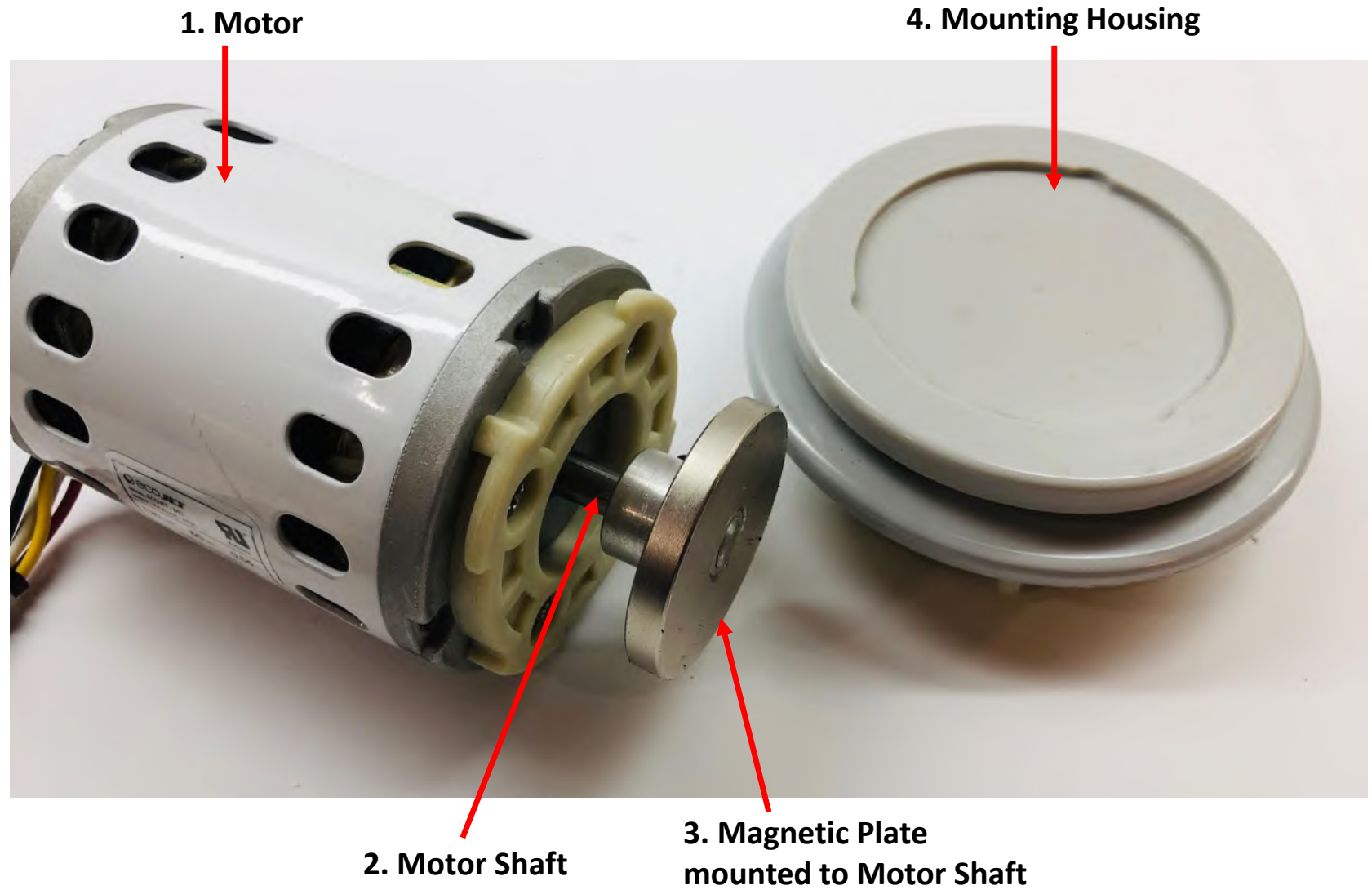
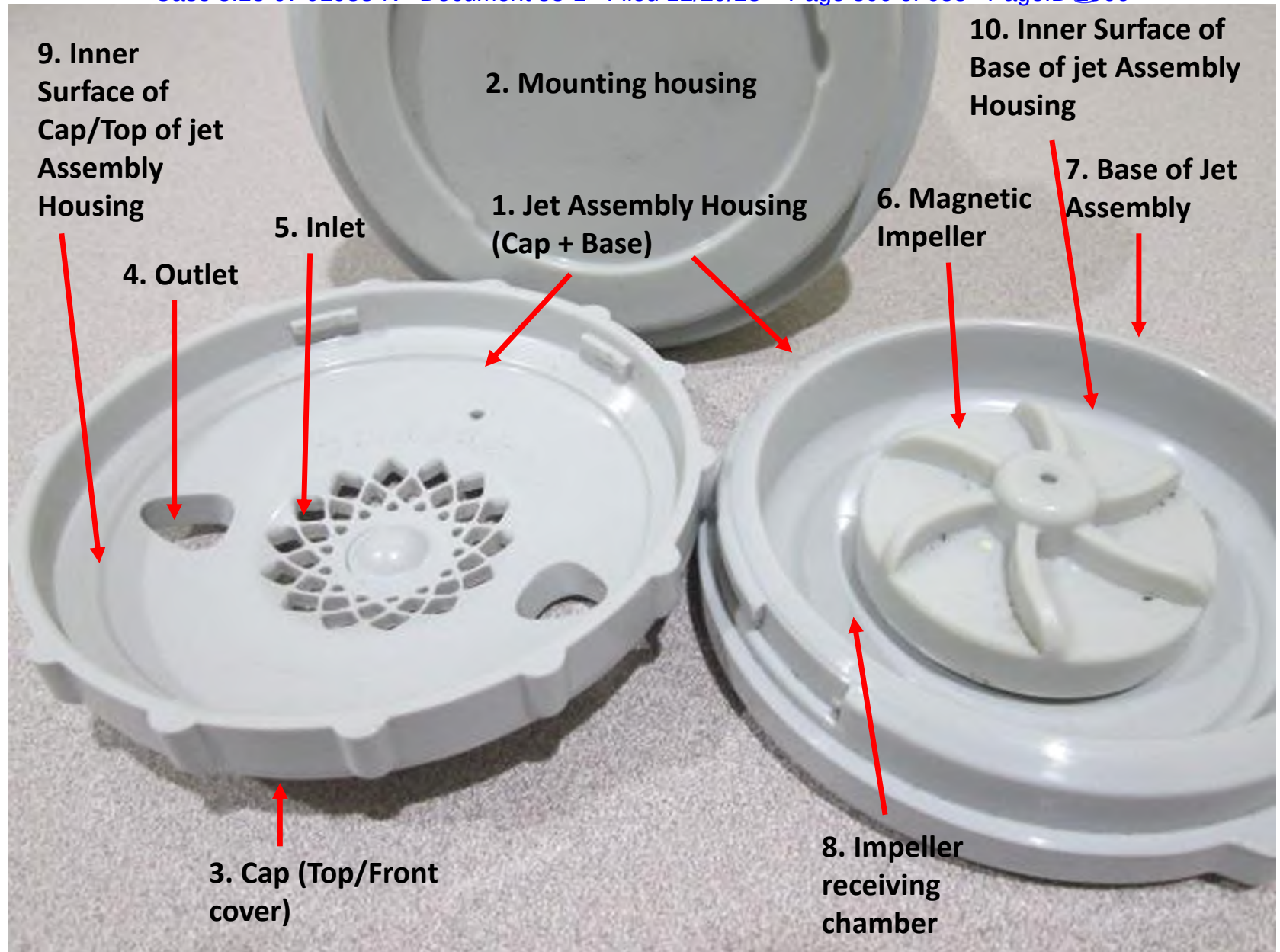


Figure 8

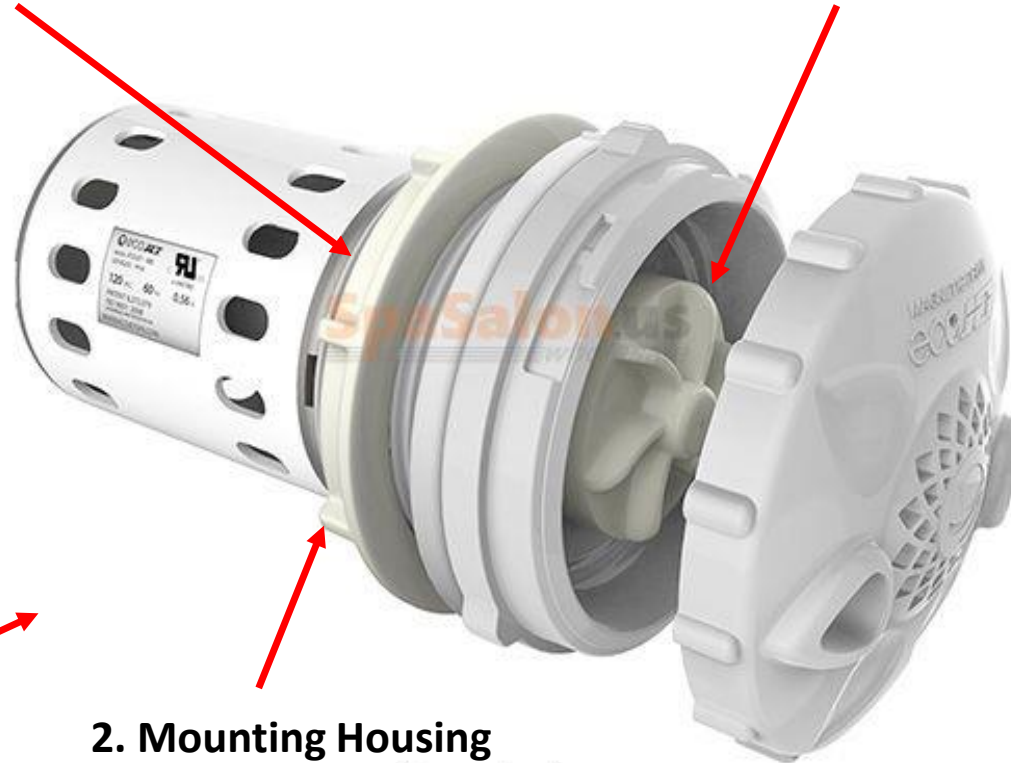


ECO magnetic drive jet

Option - complete set (Wet cover + dry motor)

3. Magnetic Plate (Attached to motor shaft contained Inside of mounting housing)

1. Magnetic Impeller



2. Mounting Housing
front view

This image shows that the Magnetic Plate and Magnetic Impeller rotate on the same axis



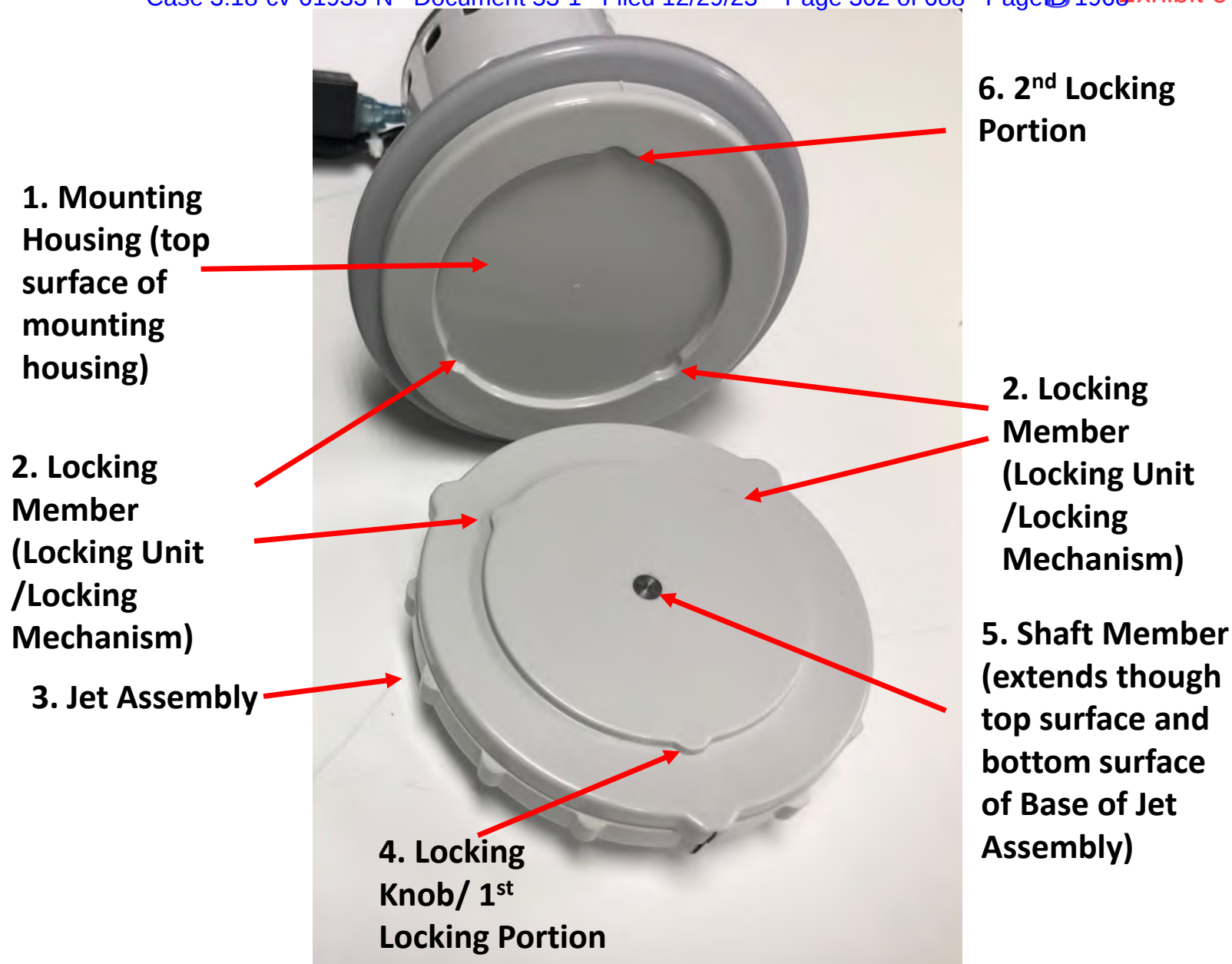
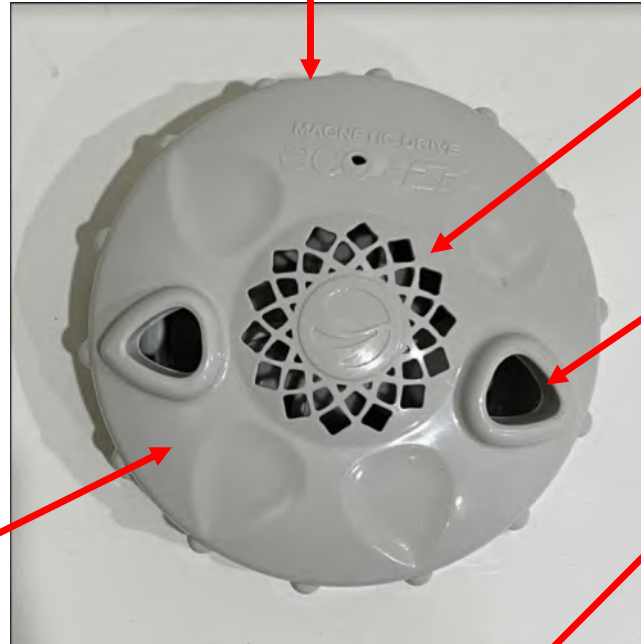


Figure 11

1. Jet Assembly

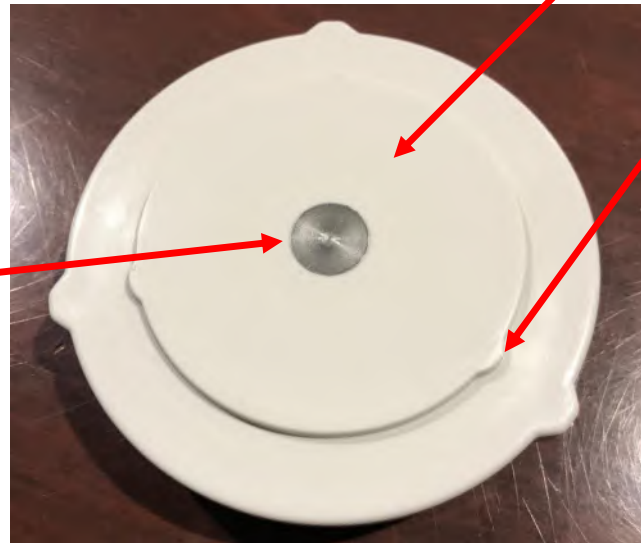


2. Inlet

3. Outlet

**7. Outer Surface
of Cap/Top of jet
Assembly
Housing**

**6. Outer Surface of
Base/Bottom of Jet
Assembly Housing**



**4. Locking Knob
(locking mechanism)**

**5. Shaft Member
(extends though
top surface and
bottom surface
of Base of Jet
Assembly)**

Figure 12

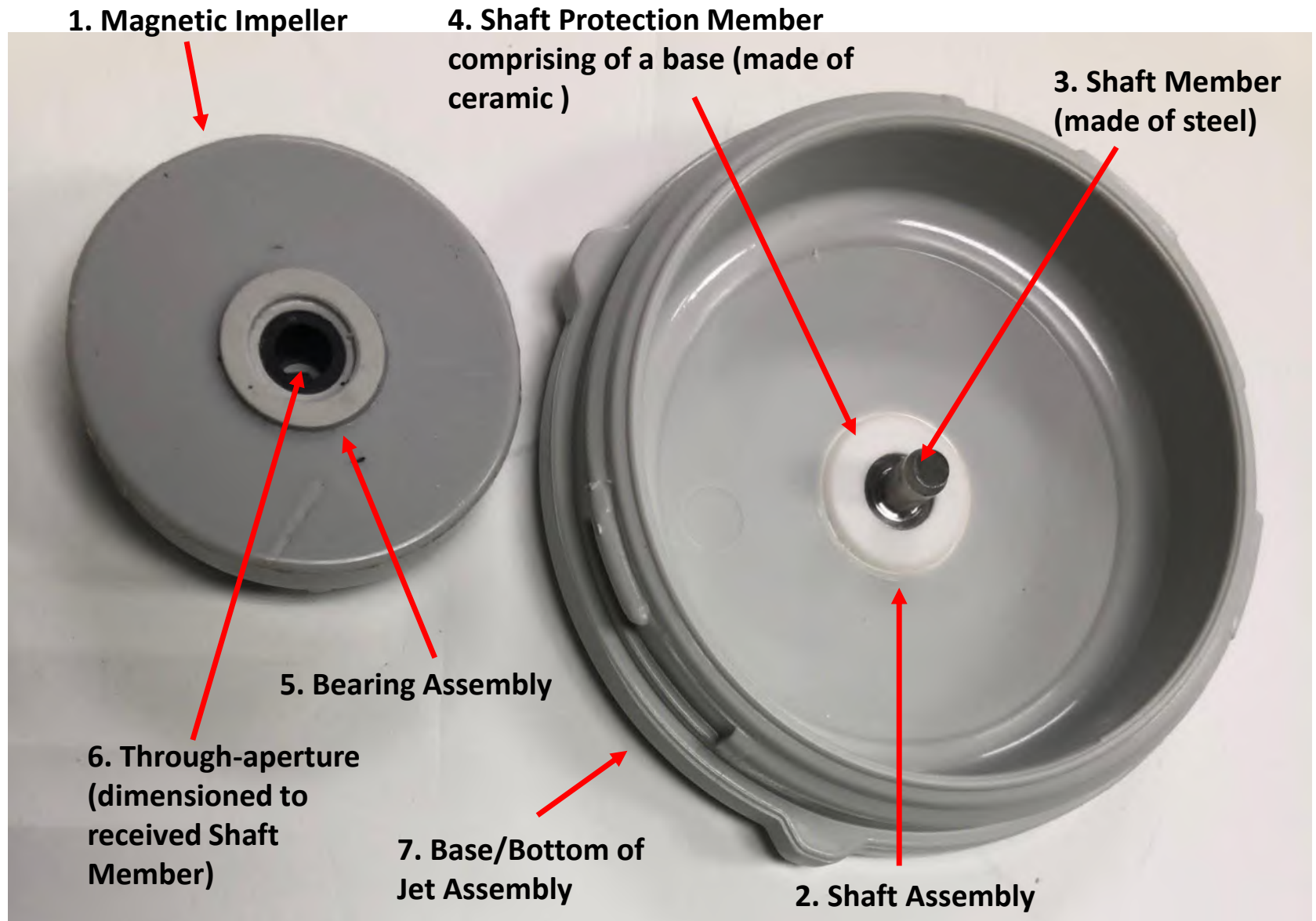


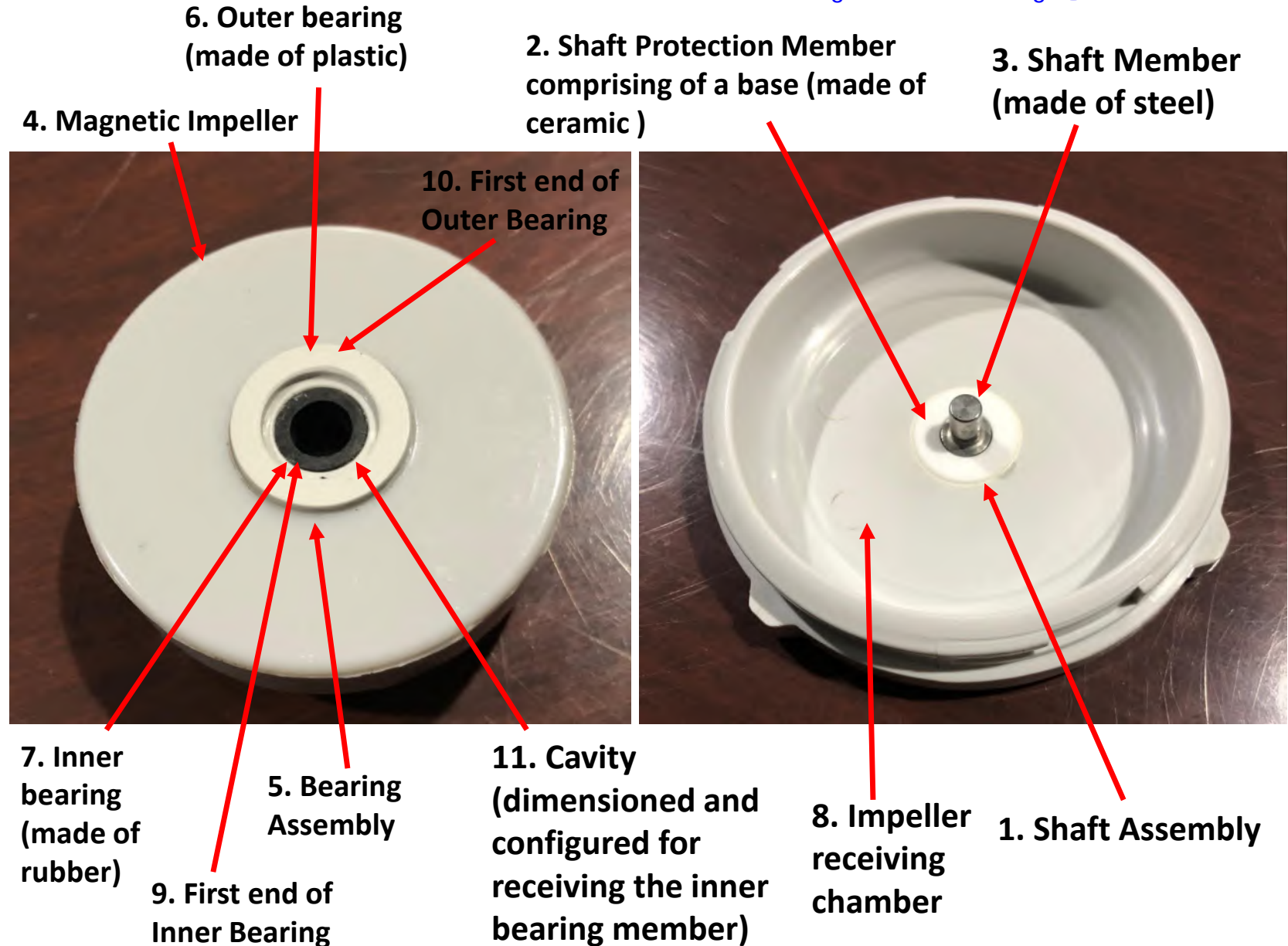
Figure 13

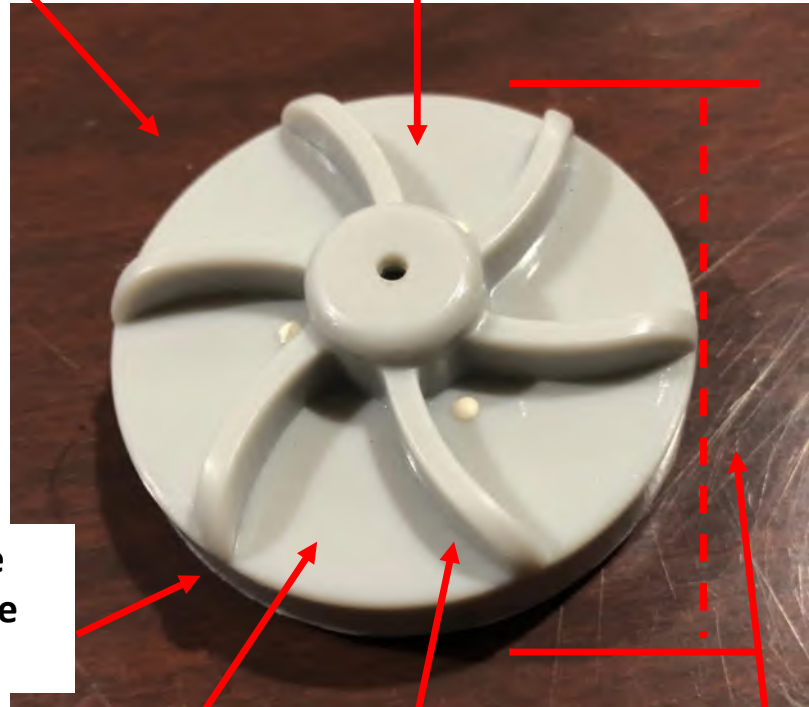
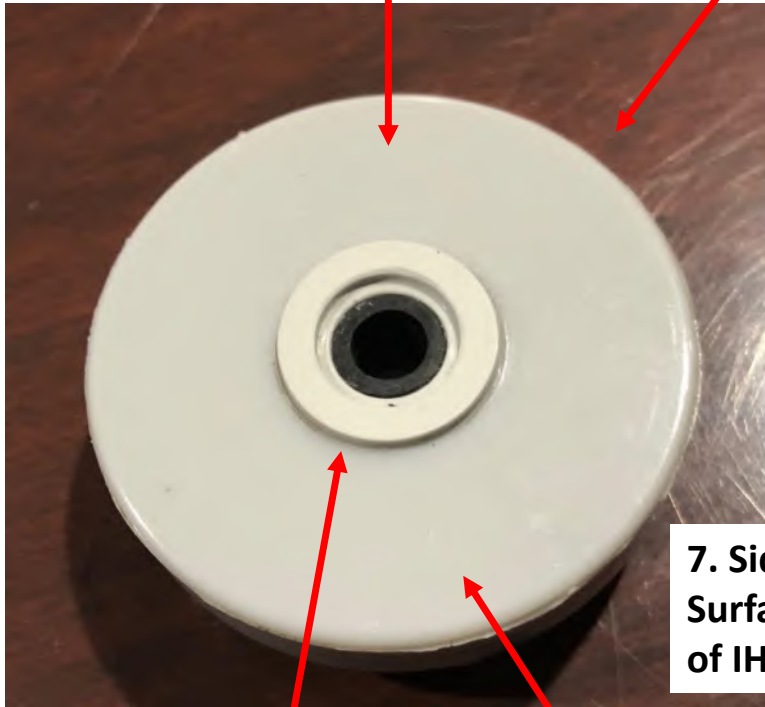
Figure 14

Magnetic Impeller

2. Bottom/Lower Surface of IH

3. Impeller housing ("IH")

4. Top/Upper Surface of IH



7. Side Surface of IH

8. Bearing Assembly

5. Magnetic plate/disk is fully enclosed within Impeller Housing

1. Arm Member

6. Outer Diameter

Figure 15

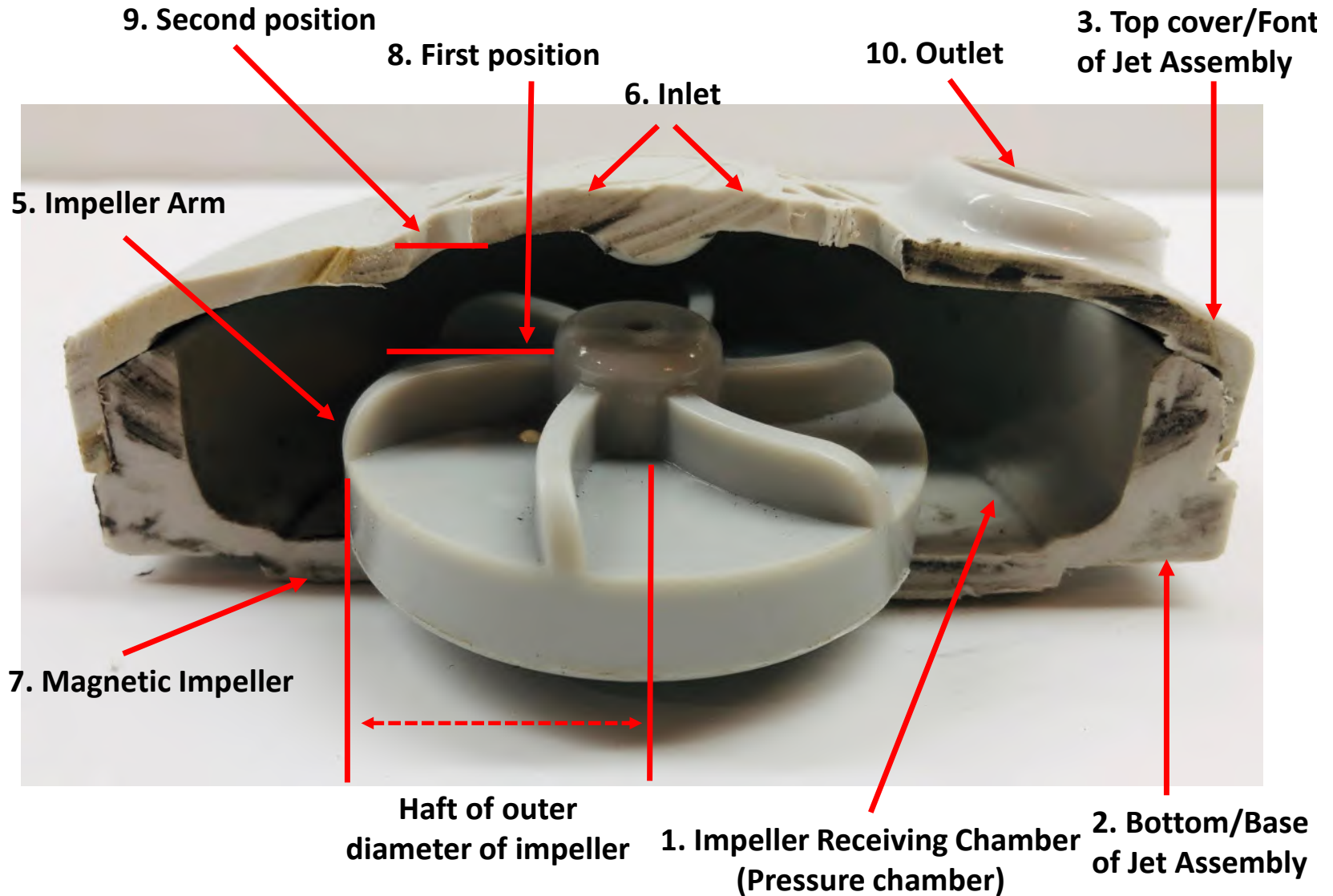
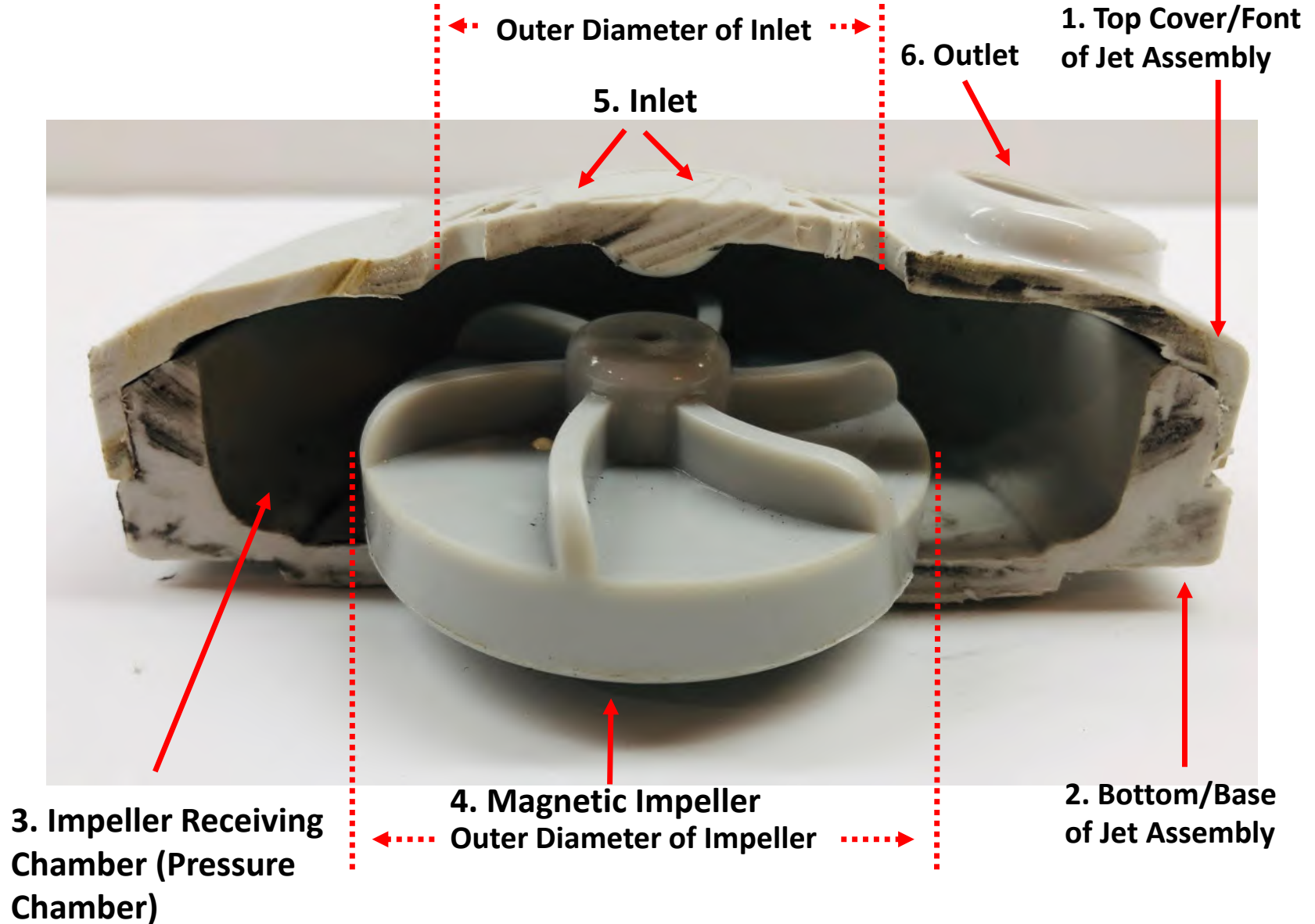




Figure 16

← → ↻ 📄 lexor.com/products/disposable-liners-200ct?variant=42120649212070

age Starts At **\$2495** **FREE SHIPPING** For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key


 **Lexor®** [PEDICURE CHAIRS](#) [PROMOTIONS](#) [SPECIAL FEATURES](#) [SALON FURNITURE](#) [PARTS & ACCESSORIES](#) [SHOWROOMS](#)



Disposable Liners (200ct)

EcoJet

\$25.00

From \$2.31/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


SKU:501167

QTY.

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.


← → ↻ ⓘ Not secure | lxsalons.com/product/liberte/

 **Lexor**[®]
THE KEY TO SALON SUCCESS.


Home Pedi-Spa Furniture Parts Promo Explore

Smart Features


SHARE



ECOJET[™] Magnetic Drive
Distinctively designed to operate stronger, quieter and cooler to withstand long hours of usage in a typical nail salon. Ecojet is UL listed and backed with 2 U.S. utility patents giving you and your clients confidence in the rock-solid performance and long service life.



ECOJET[™] Disposable Liner
Your clients will appreciate the extra care taken to bring them a more sanitary experience from using disposable liners.



NEW EcoAir[™] Vent
Easily attach your safe and nail stations with

Liner

**1. Outer diameter
of Shaft Protection
Member**

**2. Outer diameter
of Outer Bearing
Member**



1. Prestige model



https://www.youtube.com/watch?time_continue=26&v=kuwENge4QyU (Second 20 shows EcoJet)



(Cropped on Oct 19, 2020)

2. Model Elite



https://www.youtube.com/watch?time_continue=4&v=j3YRg7n8_Pc (Second 19 shows EcoJet)

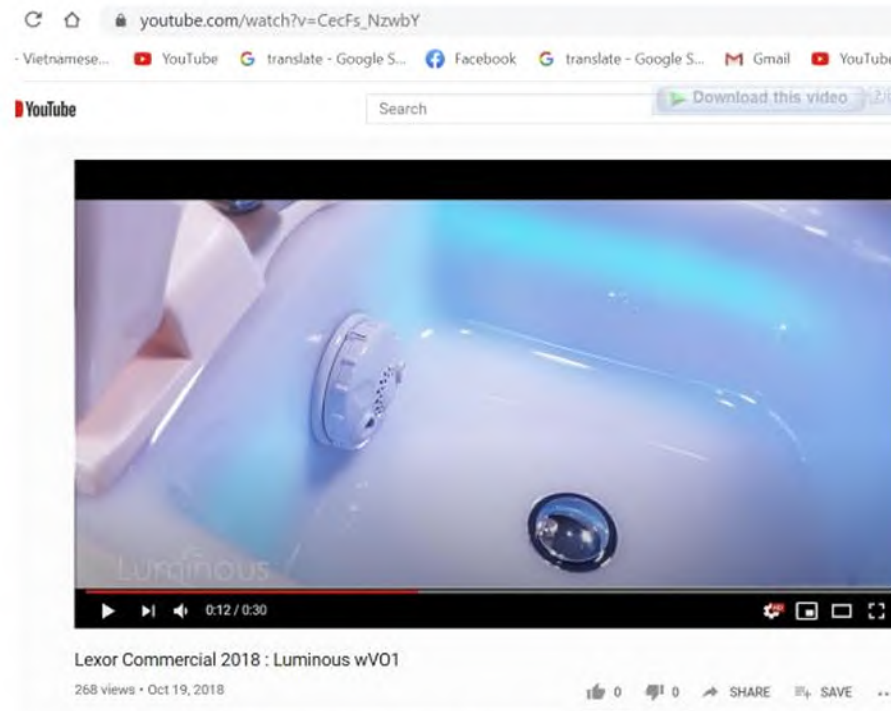


(Cropped on Oct 19, 2020)

3. Model Luminous



https://www.youtube.com/watch?v=CecFs_NzwbY (Second 22 mentions EcoJet)



(Cropped on Oct 19, 2020)

6. Liberte model



Not secure | lexorcanada.com/product/liberte/

YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for

Not secure | lexorcanada.com/product/liberte/

e... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search

Lexor
Smart Pedi-Spa. Smart Choice.

PEDICURE SPA FURNITURE ACCESSORIES SPA PARTS CONTACT

Description

Description

For those salons that are constantly pushing the boundaries of class and elegance, Lexor presents: The Liberte™. Keep your clients in awe as they partake in this limitless experience. From the luxurious and high-performing UltraLeather™, to the elegant wood trim to the glowing Aurora LED Color-Changing Bowl, the Liberte™ boasts exclusive stature that only others dream of.

Smart Features:

- Ecojet™ Magnetic Drive (Patent no: RE45844)
- Ecojet™ Disposable Liner
- Tru-Touch™ Shiatsu Massage System (tapping, kneading, rolling, etc.)
- Adjustable Footrest for Comfort

Additional Features:

- 1-Year Limited Warranty
- Includes Classic Curve Pedicure Stool (matching cushion color and adjustable height)
- Supple Leather Cushion
- Fully Functioning Power Seats
- Remote Control (controls seats and massage system)
- Construction: Marble Composite, High Gloss, Acetone-proof Gel Coat
- Foldable Manicure Trays with Removable Cup Holders
- Lift-up Armrest for Easy Access
- Purse/Handbag Hook
- Crystal Bowl

Cropped on Oct 19, 2020

Step 3: Slide the Motor Housing through the hole of the spa basin. Slide the Universal Adapter (backside in) onto the Motor Housing, then hand tighten the Motor Cap Lock-Nut.

Important: please let it set for a period of 1/2 hours

1. Locking Ring (used to secure mounting housing to wall of spa basin)

Trench Mark is at the 12 o'clock position

Black line is at the 6 o'clock position

Step 4: Turn the motor clockwise until it lock into place. Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug.

Male

Female

Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug (Illustrated)

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES


ELITE Pedicure Chair


MODEL CODE | SKU : 100079

SALE

\$2,495.00

MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA

BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair

QTY. - 1 +


Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At \$1995 -&- Complete 5-piece Spa Package Starts At \$2495 FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

LEXOR

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53"/74" (Upright / Reclined)

31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (optional)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

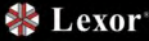
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 📄 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRIVÉ Lounge Pedicure Chair

PROMOTION

\$4,495.00

MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: **IVORY**

BASE COLOR: **BLACK MOONSTONE**

MODEL: **PRIVÉ Lounge Pedicure Chair**

QTY.

Order a complete 5-piece package with a matching n

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/private-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **71**
- HEIGHT (Upright/Reclined): **84**
- WIDTH (Trays Closed/Open): **34/49**
- Weight (lb.): **350**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 9 Amp)

← → ↻ 📄 lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** **FREE SHIPPING** For All Orders Over **\$5000**

Lexor PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,000.00~~

From \$231/month with **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: DARK WALNUT

MODEL: ENVISION Pedicure Chair

QTY. - 1 +

ADD TO CART **BUY IT NOW** **APPLY FOR FINANCING**


SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/envision-pedicure-chair?variant=41769101852838

FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53 3/4" / 74" (Upright / Reclined)

31" / 47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 500 GPH At Floor Level


Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

LEXOR® CARE

← → ↻ 📄 lexor.com/products/infinity-pedicure-chair?variant=41769152676006


 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO





The image shows a high-end, brown leather pedicure chair with a black base and a matching black footrest. A small, matching black stool is positioned to the left of the chair. The chair features a high backrest, armrests, and a control panel on the side of the base.

INFINITY Pedicure Chair

SALE
\$1,995.00
MSRP \$2,795.00

From \$185/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair ▾

QTY.

Order a complete 5-piece package with a matching

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/Infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests *(for easy access)*
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS *(in.)*

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight *(lb.)*: 260
- Water Capacity *(gal.)*: 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A


(Power needed per spa chair: 6 Amp)

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**

 **Lexor®**

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO





LIBERTÉ Pedicure Chair


SALE

\$2,395.00

~~MSRP: \$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL: LIBERTÉ Pedicure Chair ▾

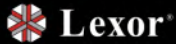
QTY:

Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



BUNDLE UP AND

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

- **LENGTH (Upright/Reclined): 53/74**
- **HEIGHT (Upright/Reclined): 56/52**
- **WIDTH (Trays Closed/Open): 31/47**
- **Weight (lb.): 260**
- **Water Capacity (gal.): 4**


Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining
 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH AT Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE




← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As 1% With Credit Key

 **Lexor®**

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (*in.*)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (*lb.*): 260
- Water Capacity (*gal.*): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level


Power Source: 115VAC, 60Hz, 15A


(Power needed per spa chair: 6 Amp)

LEXOR® CARE

← → ↺ lexor.com/products/luminous-pedicure-chair?variant=41753030033574

BUNDLE

 [PEDICURE CHAIRS](#) [PROMOTIONS](#) [SPECIAL FEATURES](#) [SALON FURNITURE](#) [PARTS & ACCESSORIES](#) [SHOW](#)





LUMINOUS Pedicure Chair

SALE


\$2,195.00

MSRP: ~~\$2,995.00~~

From \$203/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL **LUMINOUS Pedicure Chair**

QTY.

Order a complete 5-piece package with a matching

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/luminous-pedicure-chair?variant=41753030033574

JP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top

*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

US 10,215,177 Claim Language	Evidence of Infringement EcoJet Universal 3.5 (Shafted)
1. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 8 (1) and Fig. 10(1-3) the motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.
b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,	As shown in Fig. 4, 11(5-7, and 9) , and 14(1 and 4) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.
c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 4, 8(1-6), and 10(1-3) the magnetic plate and the magnetic impeller rotate on the same axis during operation.
d) wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive said bearing assembly,	As shown in Fig. 15(1-4) and 16(2-4) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive the bearing assembly.
e) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,	As shown in Fig. 16(1-8) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.
f) wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing,	As shown in Fig. 16(2) the magnetic impeller is fully enclosed within the impeller housing.
g) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly,	As shown in Fig. 11(6-7), 14(4-6), 15(1-4), and 16(4) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.
h) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
i) wherein said impeller-receiving chamber is defined by said base and said top cover when said base and said top cover are secured to one another,	As shown in Fig. 19 (2, 3, and 4) the impeller-receiving chamber is defined by said base and said top cover when said base and said top cover are secured to one another.

j) wherein impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller, to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation, and to perform as a pressure chamber without any fluid guiding channel on said base of said jet assembly housing in propelling a stream of the fluid through each of said at least one outlet aperture to the setting or work environment in the manicure and pedicure industries,	As shown in Fig. 4, & 19(4 and 7) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller, to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation, and to perform as a pressure chamber without any fluid guiding channel on the base of jet assembly housing in propelling a stream of fluid through each outlet aperture to the setting or work environment in the manicure and pedicure industries.
k) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 15(1-3) the bearing assembly comprises at least one bearing member.
l) wherein said shaft assembly comprises a shaft member, and	As shown in Fig.14(3) and 17(1) the shaft assembly comprises a shaft member.
m) wherein said shaft member extends through said inner surface of said jet assembly housing; and	As shown in Fig. 13(5) and 18(1-3) the shaft member extends through the inner surface of the jet assembly housing.
n) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
o) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while motor assembly is secured to the bottom surface of the mounting housing member.
2. The fluid pump according to claim 1, wherein said impeller housing further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.	As shown in Fig. 4, 7(1-2), and 14(3 and 7) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.

3. The fluid pump according to claim 1, wherein, during operation, said magnetic impeller rotates around said shaft member that is secured within said jet assembly housing, and wherein said shaft member provides an axis of rotation for said magnetic impeller.	As shown in Fig. 4, 11(4-6 and 9), 14(1, 3, and 4-6), and 16 the magnetic impeller rotates around the shaft member that is secured within the jet assembly housing, and the shaft member provides an axis of rotation for magnetic impeller.
4. The fluid pump according to claim 3, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.	As shown in Fig. 4, 11(5-7), and 14(3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member.
5. The fluid pump according to claim 2, wherein said through-aperture is a central, through-aperture.	As shown in Fig. 4, 7(2), and 14(7) the through-aperture is a central, through-aperture.
6. The fluid pump according to claim 1, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.	As shown in Fig. 20 the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.
7. The fluid pump according to claim 1, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3), 17(1), and 18(3) the shaft member is of steel or a metal material.
8. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 8(1) and 10(1-3) the motor assembly comprises a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.
b) a jet assembly comprising a shaft assembly, a jet assembly housing and a magnetic impeller,	As shown in Fig. 4, 11(5, 6,7, and 9) , and 14(1 and 4) the jet assembly comprises a shaft assembly, a jet assembly housing, and a magnetic impeller.
c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 4, 8(1-6), and 10(1-3) the magnetic plate and the magnetic impeller rotate on the same axis during rotation.
d) wherein said jet assembly housing comprising an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 7(3-4), 11(1-4 and 8-11), 13(6), 18(1-2), and 19(1 and 4) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.

e) wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another, and	As shown in Fig. 19(2-4) the impeller-receiving chamber is defined by the base and the top cover of the jet assembly housing when the base and the top cover are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,	As shown in Fig. 4 and 19(2-4 and 7) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation.
g) wherein said shaft assembly comprises a shaft member,	As shown in Fig. 14(3) and 17(1) the shaft assembly comprises a shaft member.
h) wherein said shaft member extends through said inner surface of said jet assembly housing, and	As shown in Fig. 13(5) and 18(1-3) the shaft member extends through the inner surface of the jet assembly housing.
i) wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive a bearing,	As shown in Fig. 14(4-6), 15(1-4) and 16(2-4) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive a bearing.
j) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,	As shown in Fig. 16(1-8) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.
k) wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing, and	As shown in Fig. 16(2) the magnetic plate of the magnetic impeller is fully enclosed within the impeller housing.
l) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly;	As shown in Fig. 11(6-7), 14(4-6), 15(1-4), and 16(4) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.
m) a mounting housing member comprising a too surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprising a too surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
n) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member; and	As shown in Fig, 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while the motor assembly is secured to the bottom surface of the mounting housing member.
o) a liner dimensioned and configured for being positioned between a bottom surface of said base of said jet assembly housing and said top surface of said mounting housing member.	As shown Fig. 23-25 Lexor sells separately a liner dimensioned and configured for being positioned between a bottom surface of said base of said jet assembly housing and said top surface of said mounting housing member.

9. The fluid pump according to claim 8, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.	As shown in Fig. 4, 7(1-2), and 14(3 and 7) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.
10. The fluid pump according to claim 8, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.	As shown in Fig. 20 the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.
11. The fluid pump according to claim 8, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.	As shown in Fig. 4, 11(5-7), and 14(3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member.
12. The fluid pump according to claim 9, wherein said through-aperture is a central, through-aperture.	As shown in Fig. 4, 7(2), and 14(7) the through-aperture is a central, through-aperture.
13. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 8(1), & 10(1-3), the motor assembly comprises a motor, a motor shaft, and a magnetic plate mounted to said motor shaft.
b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller,	As shown in Fig. 4, 11(5-7, and 9), and 14(1 and 4) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.
c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 4, 8(1-6), and 10(1-3) the magnetic plate and the magnetic impeller rotate on the same axis during operation.
d) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
e) wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another,	As shown in Fig. 19(2-4) the impeller-receiving chamber is defined by the base and the top cover of the jet assembly housing when the base and the top cover are secured to one another.

f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,	As shown in Fig. 4 and 19(2-4 and 7) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation.
g) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 15(1-3) the bearing assembly comprises at least one bearing member.
h) wherein said shaft assembly comprises said shaft member and a shaft protection member,	As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises a shaft member and shaft protection member.
i) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and wherein said base of said shaft protection member is positioned between said bearing assembly and said base of said jet assembly housing,	As shown in Fig. 14(1-6) and 17(1-2) the shaft protection member comprises a base and is positioned between the bearing assembly and the base of the jet assembly housing.
j) wherein said magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive said bearing assembly,	As shown in Fig. 15(1-4) and 16(2-4) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive the bearing assembly.
k) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,	As shown in Fig. 16(1-8) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.
l) wherein said magnetic plate of said magnetic impeller is fully enclosed within said impeller housing, and	As shown in Fig. 16(2) the magnetic plate of the magnetic impeller is fully enclosed within the impeller housing.
m) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly; and	As shown in Fig. 11(6-7), 14(4-6), 15(1-4), and 16(4) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.
n) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries,	As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.
o) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while said motor assembly is secured to the bottom surface of the mounting housing member.

<p>14. The fluid pump according to claim 1, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.</p>	<p>As shown in Fig. 4, 7(1-2), and 14(3 and 7) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.</p>
<p>15. The fluid pump according to claim 13, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.</p>	<p>As shown in Fig. 20 the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.</p>
<p>16. The fluid pump according to claim 13, wherein each of said jet assembly housing and said mounting housing member further comprises at least one locking mechanism member, and wherein said at least one locking mechanism member of said jet assembly housing and said at least one locking mechanism member of said</p>	<p>As shown in Fig. 12(1-4) the jet assembly housing and mounting housing member further comprises at least one locking mechanism member, and wherein at least one locking mechanism member of jet assembly housing and at least one locking mechanism member of mounting housing member cooperate with one another such that a locking mechanism is formed to prevent rotation of jet assembly housing during operation.</p>
<p>17. The fluid pump according to claim 16, wherein said at least one locking mechanism member of said jet assembly housing is at least one locking mechanism knob positioned on said outer surface of said base of said jet assembly housing, wherein said at least one locking mechanism member of said mounting housing member is at least one locking mechanism aperture positioned on said top surface of said mounting housing member, and wherein said at least one locking mechanism aperture is dimensioned and configured for receiving said at least one locking mechanism knob such that the locking mechanism is formed when said at least one locking mechanism knob and said</p>	<p>As shown in Fig. 12(1-4), at least one locking mechanism member of jet assembly housing is at least one locking mechanism knob positioned on outer surface of base of jet assembly housing, wherein at least one locking mechanism member of mounting housing member is at least one locking mechanism aperture positioned on top surface of said mounting housing member, and wherein at least one locking mechanism aperture is dimensioned and configured for receiving at least one locking mechanism knob such that the locking mechanism is formed when at least one locking mechanism knob and at least one locking mechanism aperture are secured with one another.</p>
<p>18. The fluid pump according to claim 17, wherein said locking mechanism is a detachable locking mechanism.</p>	<p>As shown in Fig. 12(1-4) the locking mechanism is a detachable locking mechanism.</p>
<p>19. The fluid pump according to claim 16, wherein said locking mechanism is a detachable locking mechanism.</p>	<p>As shown in Fig. 12(1-4) the locking mechanism is a detachable locking mechanism.</p>

20. The fluid pump according to claim 13, wherein said shaft member is secured within said jet assembly housing, wherein said shaft member provides an axis of rotation for said magnetic impeller, and wherein, during operation, said magnetic impeller rotates around said shaft member.	As shown in Fig. 4, 11(4-6 and 9), 14(1, 3, and 4-6), and 16 the magnetic impeller rotates around the shaft member that is secured within the assembly housing, and wherein the shaft member provides an axis of rotation for magnetic impeller.
21. The fluid pump according to claim 20, wherein said shaft member is secured generally centrally within said base of said jet assembly housing.	As shown in Fig. 14(3) and 18(3) the shaft member is secured generally centrally within said base of said jet assembly housing.
22. The fluid pump according to claim 20, wherein, during operation, said shaft member is stationary relative to said magnetic impeller that is in rotation.	As shown in Fig. 4, 11(5-7), and 14(3) the shaft member is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member.
23. The fluid pump according to claim 13, wherein said top surface of said mounting housing member comprises a generally flat section that is at least 10% of said top surface for accommodating a liner being positioned between said base of said jet assembly housing and said top surface of said mounting housing member.	As shown Fig. 10(4), 12(1), and 23-25 the top surface of said mounting housing member comprises a generally flat section that is at least 10% of top surface for accommodating a liner being positioned between base of jet assembly housing and top surface of mounting housing member.
24. The fluid pump according to claim 23, where said flat section is located at a center of said mounting housing member.	As shown Fig. 10(4) the flat section is located at the center of the mounting housing member.
25. A magnetic coupling-type fluid pump for dispensing a fluid to a setting or work environment in manicure and pedicure industries, said fluid pump comprising:	The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html . See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.
a) a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to said motor shaft;	As shown in Fig. 8(1) & 10(1-3), the a motor assembly comprising a motor, a motor shaft, and a magnetic plate mounted to motor shaft.
b) a jet assembly comprising a bearing assembly, a shaft assembly, a jet assembly housing and a magnetic impeller,	As shown in Fig. 4, 11(5-7, and 9) , and 14(1 and 4) the jet assembly comprises a bearing assembly, a shaft assembly, a jet assembly housing, and a magnetic impeller.
c) wherein said magnetic plate and said magnetic impeller rotate on a same axis during operation,	As shown in Fig. 4, 8(1-6), and 10(1-3) the magnetic plate and the magnetic impeller rotate on the same axis during operation.

d) wherein said jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,	As shown in Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a top cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.
e) wherein said impeller-receiving chamber is defined by said base and said top cover of said jet assembly housing when said base and said top cover are secured to one another,	As shown in Fig. 19(2-4) the impeller-receiving chamber is defined by the base and the top cover of the jet assembly housing when the base and the top cover are secured to one another.
f) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operation,	As shown in Fig. 4 and 19(2-4 and 7), the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operation.
g) wherein said magnetic impeller comprising an impeller housing and a magnetic plate dimensioned and configured for receiving said bearing assembly,	As shown in Fig. 15(1-4) and 16(2-4) the magnetic impeller comprises an impeller housing and a magnetic plate dimensioned and configured to receive the bearing assembly.
h) wherein said magnetic impeller defines a cavity dimensioned and configured for receiving said bearing assembly,	As shown in Fig. 11(6-7), 14(4-6), 15(1-4), and 16(4) the magnetic impeller defines a cavity dimensioned and configured for receiving the bearing assembly.
i) wherein said impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member,	As shown in Fig. 16(1-8) the impeller housing comprises an upper surface, a lower surface, a side surface, an outer diameter, and at least one arm member.
j) wherein, when said base and said top cover are secured to one another, a first position being defined at a highest point of said arm member of said magnetic impeller, a second position being defined at a lowest positioned inlet aperture of said at least one inlet aperture on said inner surface of said top cover, said first position and said second position being spaced less than half of said outer diameter of said impeller,	As shown in Fig. 4, 19(2-3 and 5-9) the base and the top cover are secured to one another, with a first position being defined at a highest point of the arm member of the magnetic impeller, a second position defined at a lowest positioned inlet aperture of at least one inlet aperture on the inner surface of the top cover, the first position and the section position being spaced less than half of the outer diameter of the impeller.
k) wherein said bearing assembly comprises at least one bearing member,	As shown in Fig. 15(1-3) the bearing assembly comprises at least one bearing member.
l) wherein said shaft assembly comprises said shaft member and a shaft protection member,	As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises a shaft member and shaft protection member.
m) wherein said shaft member extends through an inner surface of said jet assembly housing,	As shown in Fig. 13(5) and 18(1-3 the shaft member extends through an inner surface of the jet assembly housing.
n) wherein said shaft protection	

<p>11) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and wherein said base of said shaft</p>	<p>As shown in Fig. 14(1-6) and 17(1-2), the shaft protection member comprises a base and is positioned between the bearing assembly and the base of the jet assembly housing.</p>
<p>o) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries</p>	<p>As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure industries.</p>
<p>p) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while said motor assembly is secured to said bottom surface of said mounting housing member.</p>	<p>As shown in Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while said motor assembly is secured to the bottom surface of the mounting housing member.</p>
<p>26. The fluid pump according to claim 25, wherein said impeller housing of said magnetic impeller further comprises a through-aperture extending from and through said upper surface to and through said lower surface, and wherein said through-aperture of said impeller housing is dimensioned and configured for receiving said shaft member.</p>	<p>As shown in Fig. 4, 7(1-2), and 14(3 and 7) the impeller housing comprises a cavity extending from and through the upper surface to and through the lower surface, and wherein the through-aperture of the impeller housing is dimensioned and configured for receiving the shaft member.</p>
<p>27. The fluid pump according to claim 26, wherein said through-aperture is a central, through-aperture.</p>	<p>As shown in Fig. 4, 7(2), and 14(7) the through-aperture is a central, through-aperture.</p>
<p>28. The fluid pump according to claim 25, wherein said outer diameter of said impeller housing of said magnetic impeller is equal to or greater than said outer diameter of said at least one inlet aperture.</p>	<p>As shown in Fig. 20 the outer diameter of the impeller housing of the magnetic impeller is equal to or greater than the outer diameter of at least one inlet aperture.</p>
<p>29. The fluid pump according to claim 25, wherein said mounting housing member further comprises at least one mounting leg.</p>	<p>As shown in Fig. 8(3) the mounting housing member further comprises at least one mounting leg.</p>
<p>30. The fluid pump according to claim 29, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.</p>	<p>As shown in Fig. 8(2-3) at least one mounting leg is dimensioned and configured for receiving a wing nut.</p>

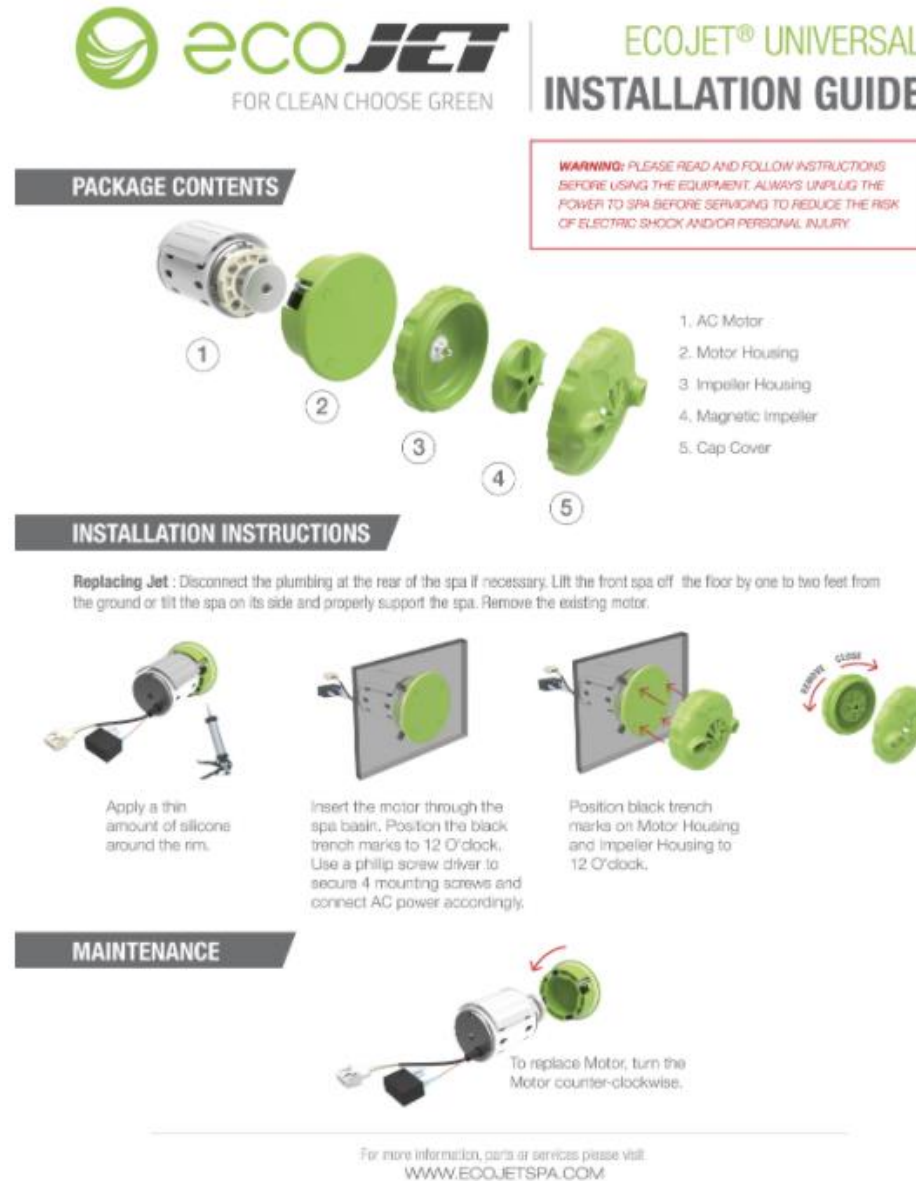
Figures for Ecojet Universal 3.50/
Second Model/Version
Shafted EcoJet II

Ecojet II magnetic drive jet
Option - wet cover & dry motor









lexor.com/product/ecojet-universal-jet-set-3-5-gray/

e... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search f

Contact Showrooms Financing Free Shipping on Spa Parts \$50+ | Call or Chat with us to place your order!

Lexor
THE KEY TO SALON SUCCESS.

Home Pedi-Spa Furniture Parts Promo Explore Ideas

YOUR CART \$0.00

ALL CATEGORIES Searching for ... All Categories (888) 479-6916

Home > Spa Parts > Plumbing Parts > EcoJet Universal Jet Set 3.5- Gray

EcoJet Universal Jet Set 3.5- Gray \$125.00

Availability: In Stock


- 1 +

ADD TO CART

SKU: ecojet-magnetic-drive-jet-kit
Categories: Plumbing Parts, Spa Parts

Description Additional information

Cropped on Oct 18, 2020





































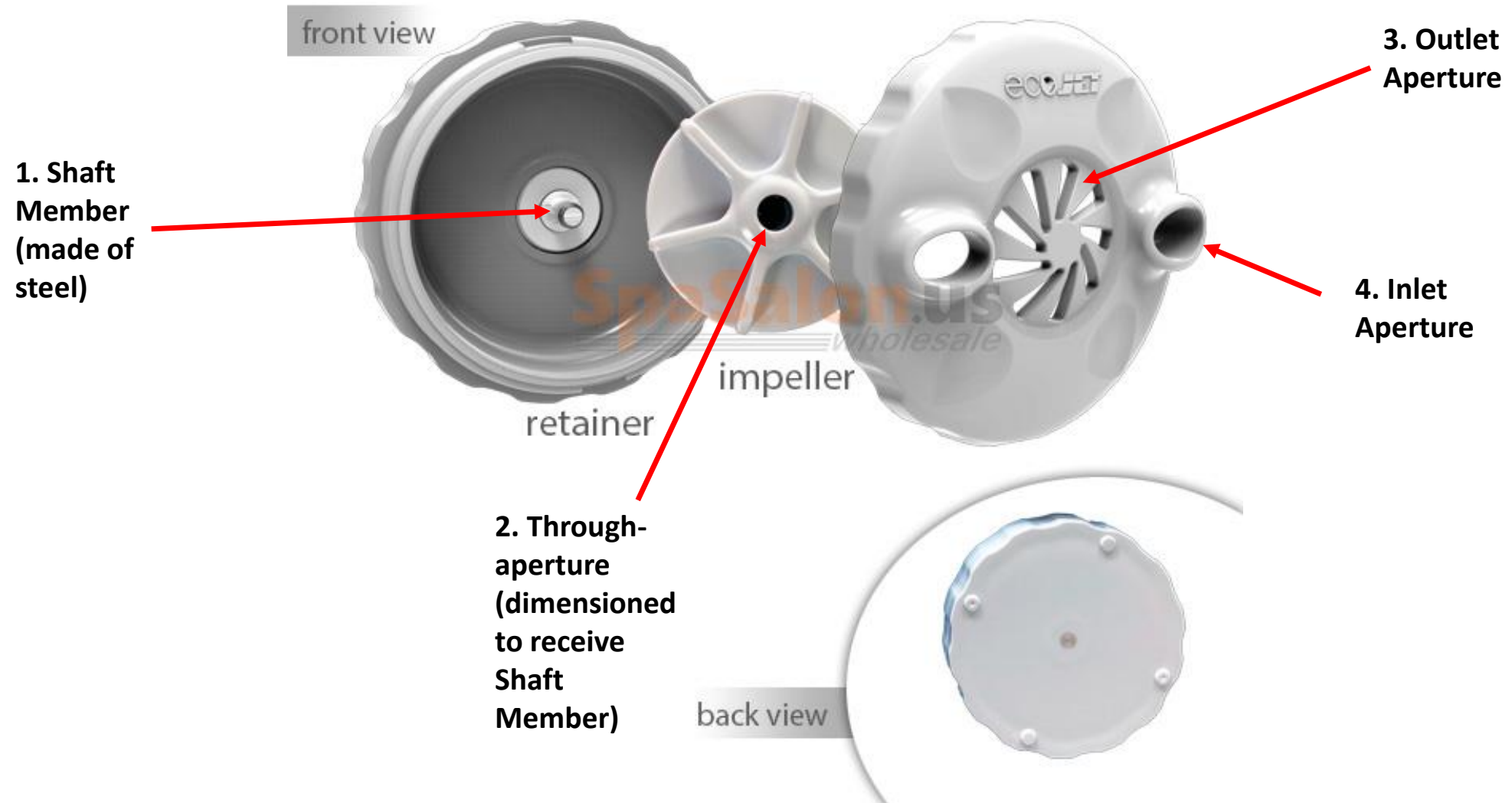
 For Clean Choose Green					
JET	MOTOR HOUSING			IMPELLER	COMPATIBILITY
ECOJET® UNIVERSAL Motor Housing & Wet-end has 4 locking dot-points.					
OTHER COMPATIBLE BRANDS Ecojet® Universal Wet-end can be replaced for other brands with 4 locking dot-points.					
OTHER JETS Ecojet® Universal Wet-end can not be used on these after market jets.					 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
					 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
		n/a			 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
					 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
ECOJET® 2017 Motor Housing & Wet-end has 3 locking dot-points.					

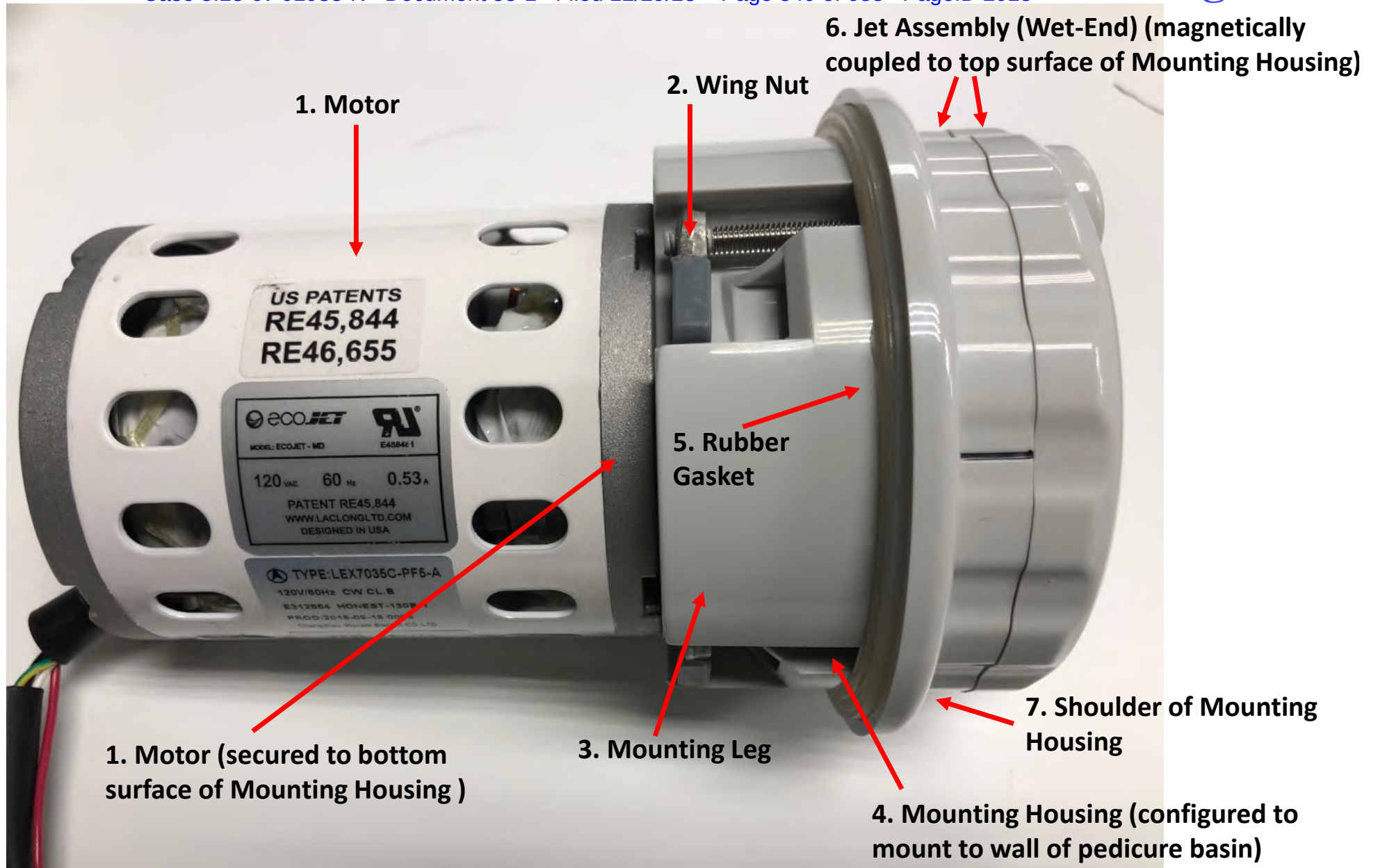
Image 2 of 2



ECO magnetic jet

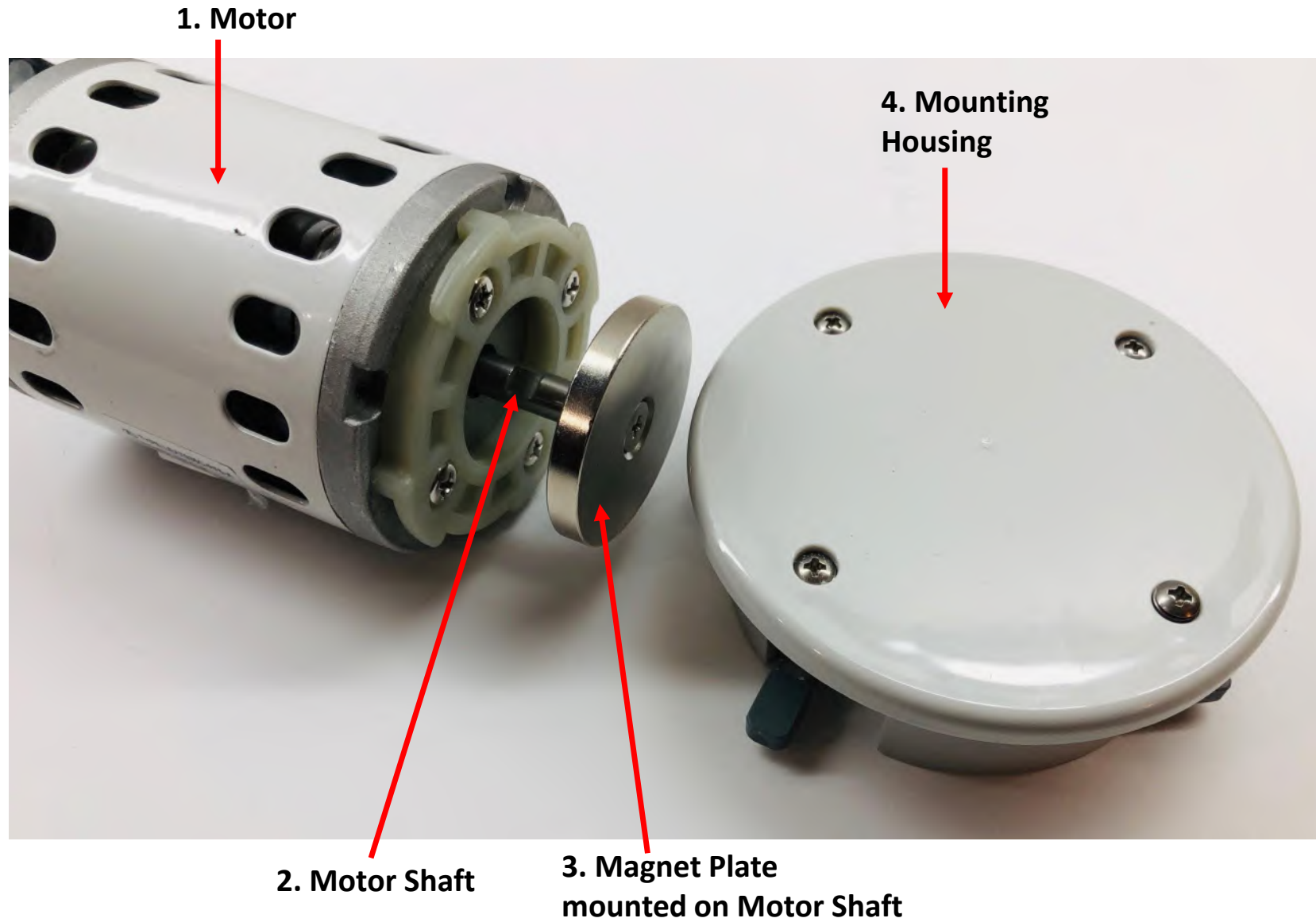
Option - new (cover + impeller + retainer)



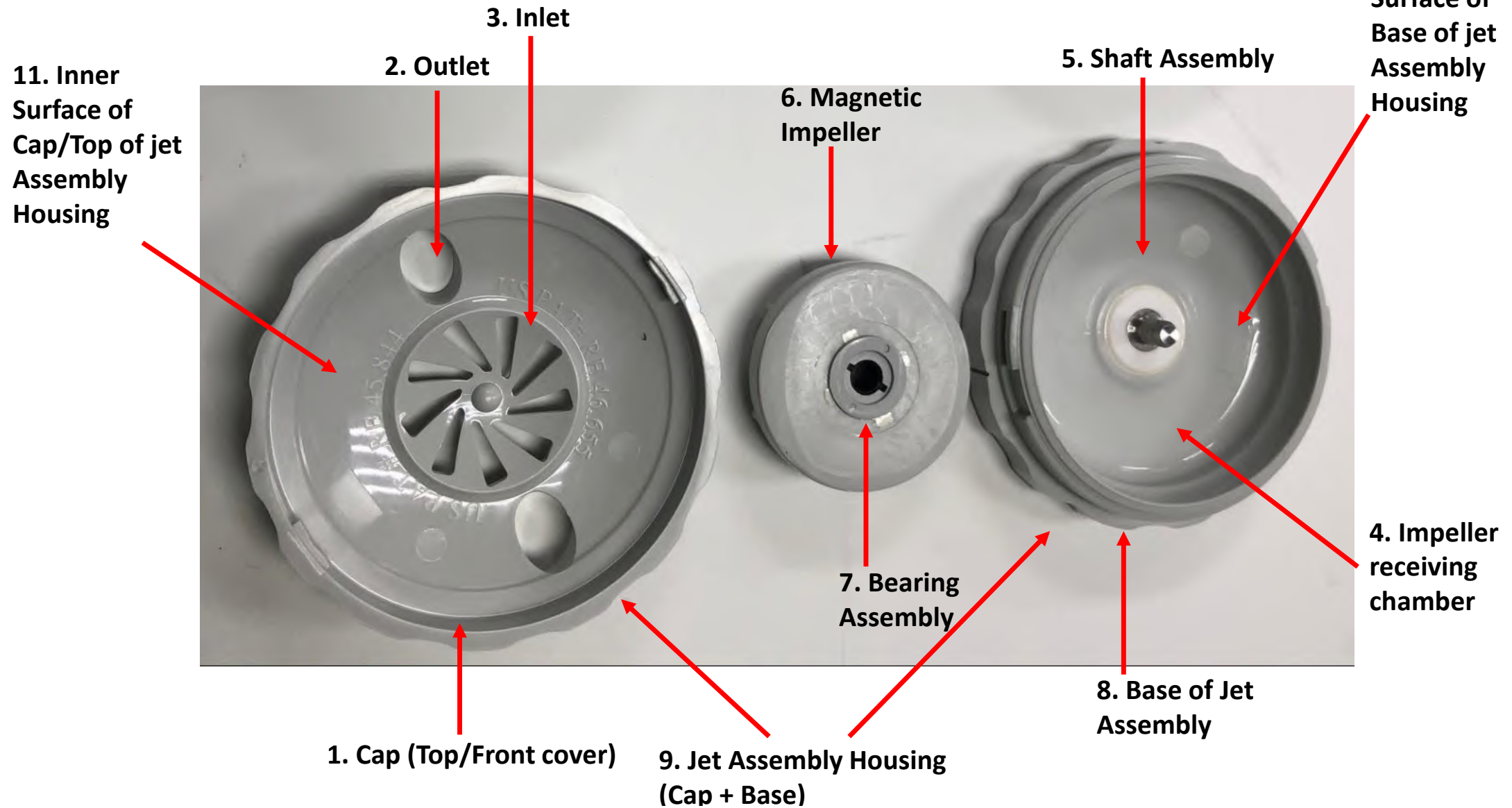


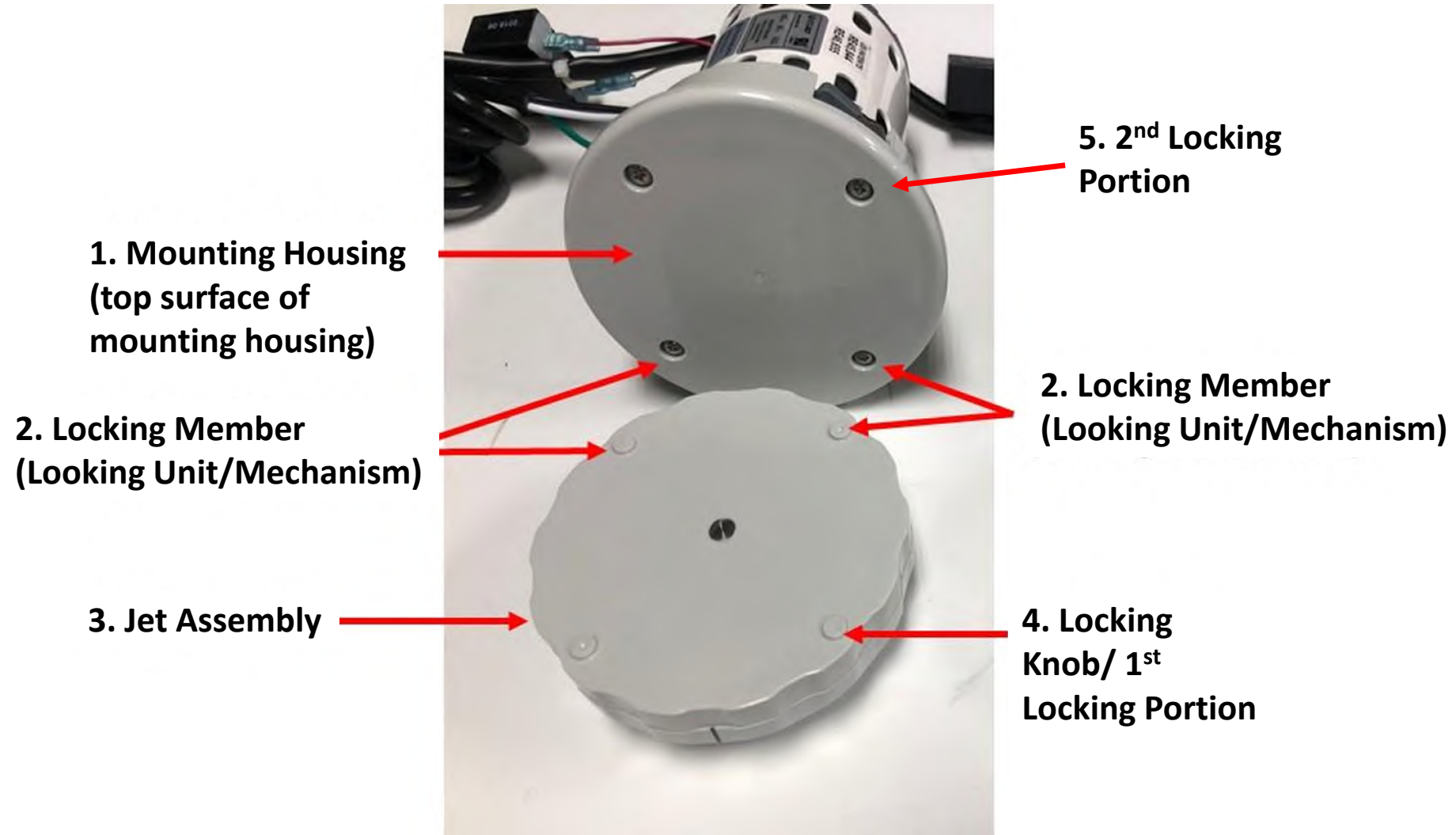
**1. Jet Assembly
(Wet-end)
(magnetically
coupled to top
surface of
Mounting
Housing)**





Jet Assembly





1. Jet Assembly

2. Inlet

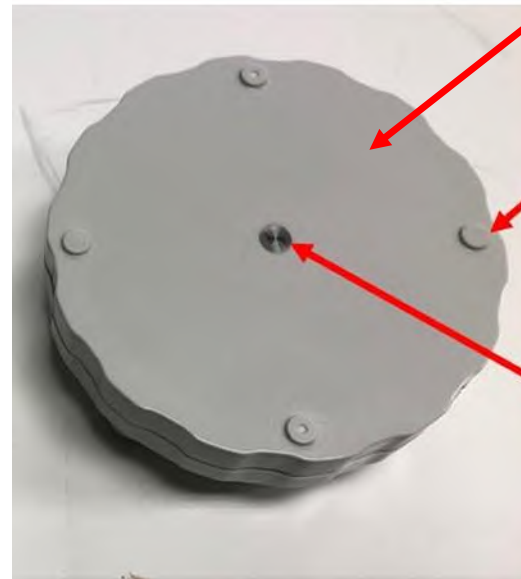
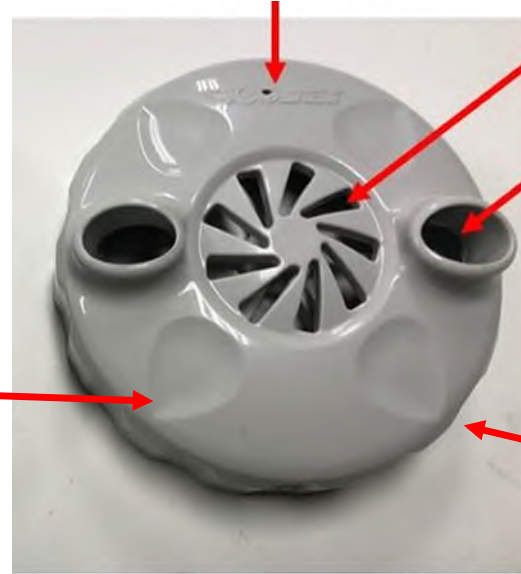
3. Outlet

**7. Outer Surface of
Cap/Top of jet
Assembly Housing**

**6. Outer Surface of Jet
Assembly Housing**

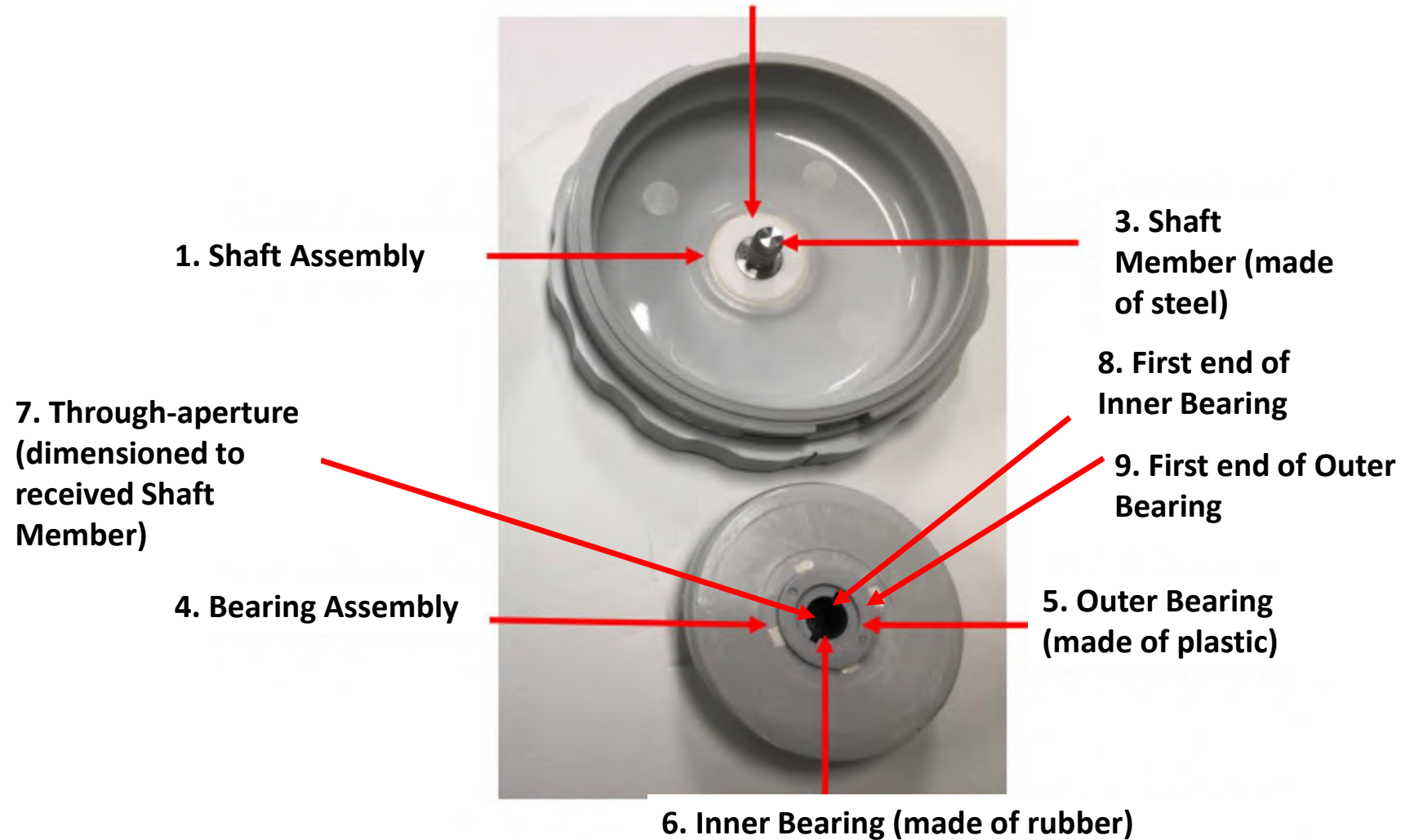
**4. Locking Knob
(locking mechanism)**

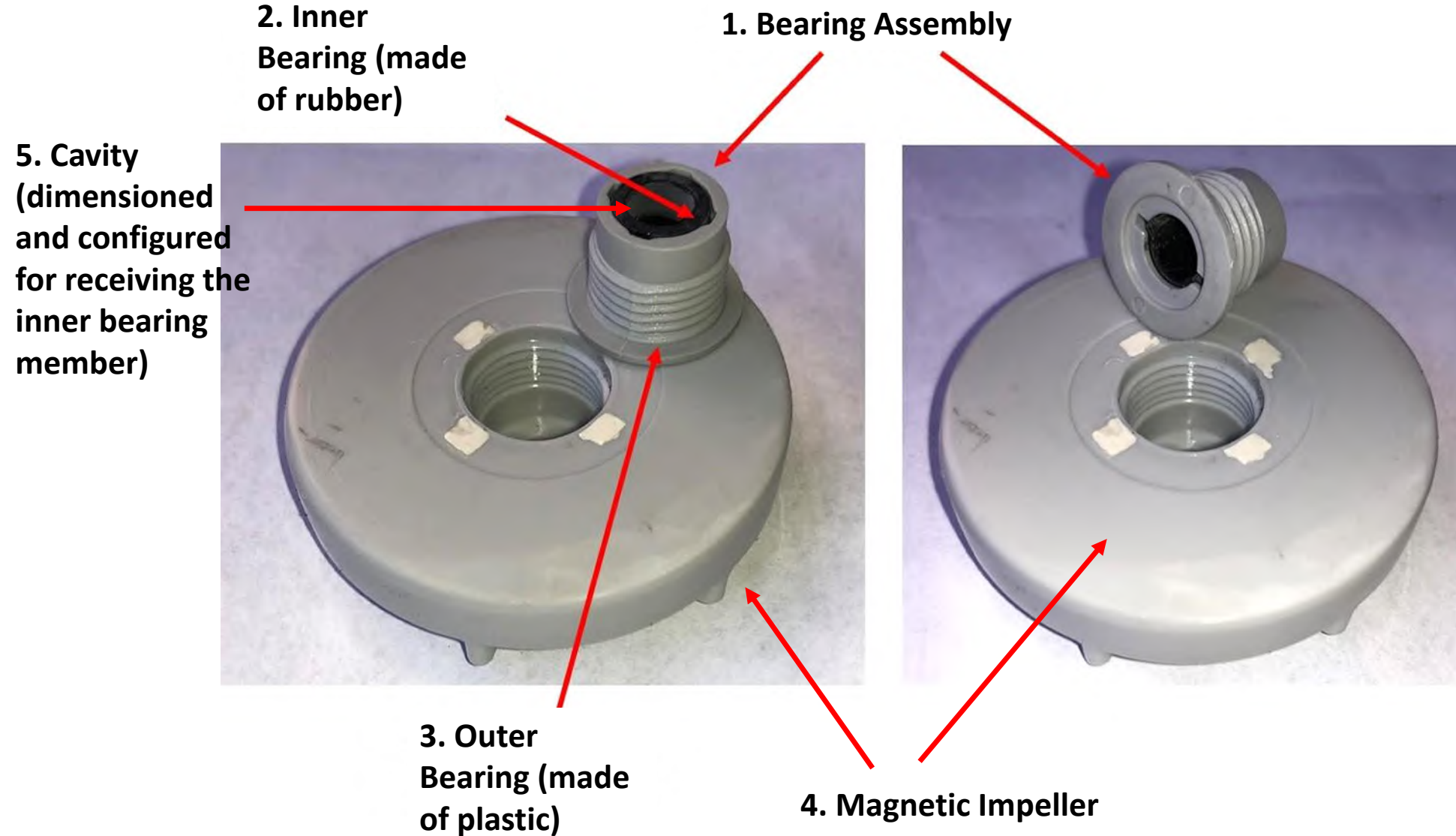
**5. Shaft Member
(extends though top
surface and bottom
surface of Base of Jet
Assembly)**



Shaft Assembly & Bearing Assembly

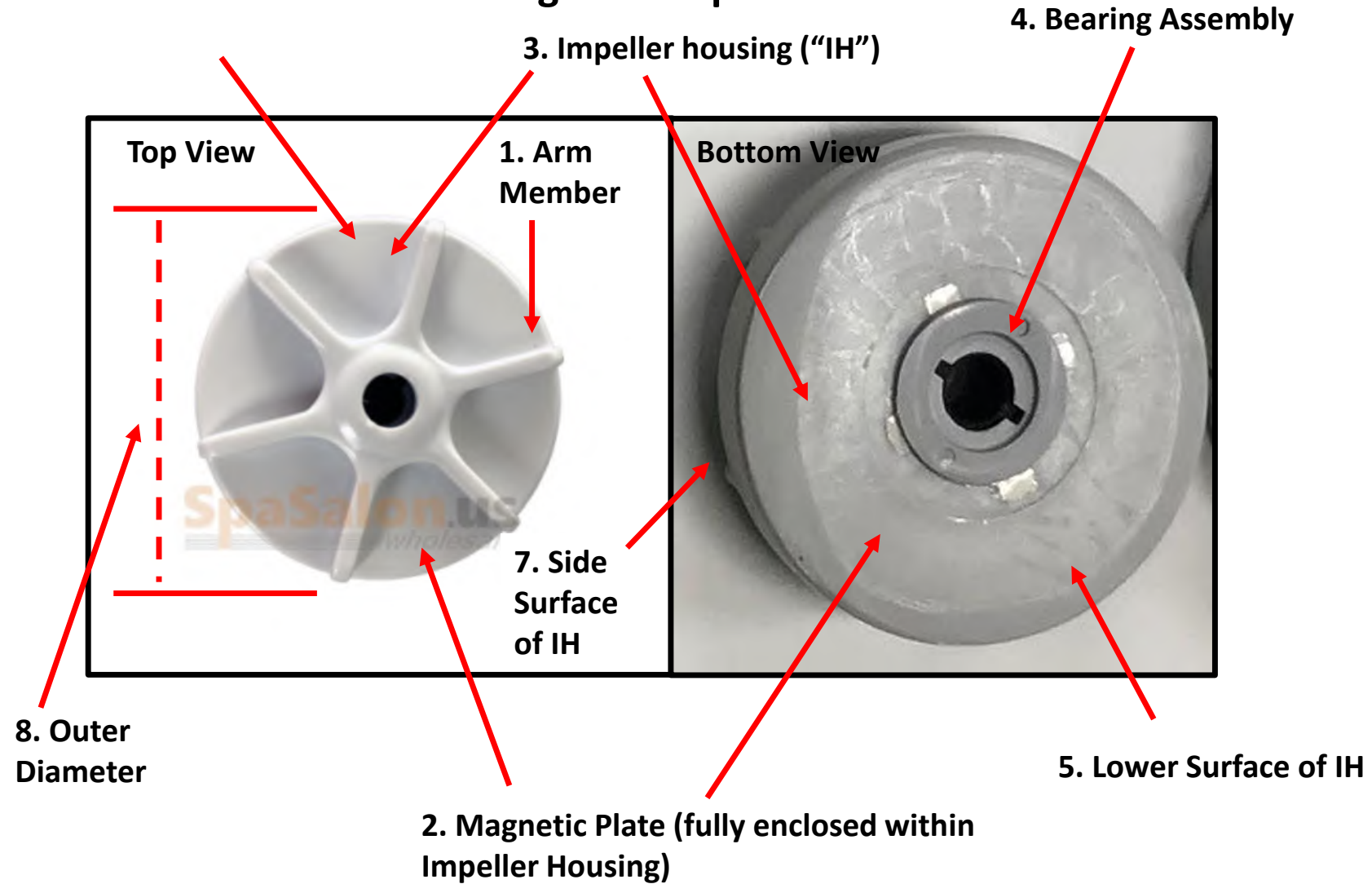
2. Shaft Protection Member
comprising of a base (made
of ceramic)

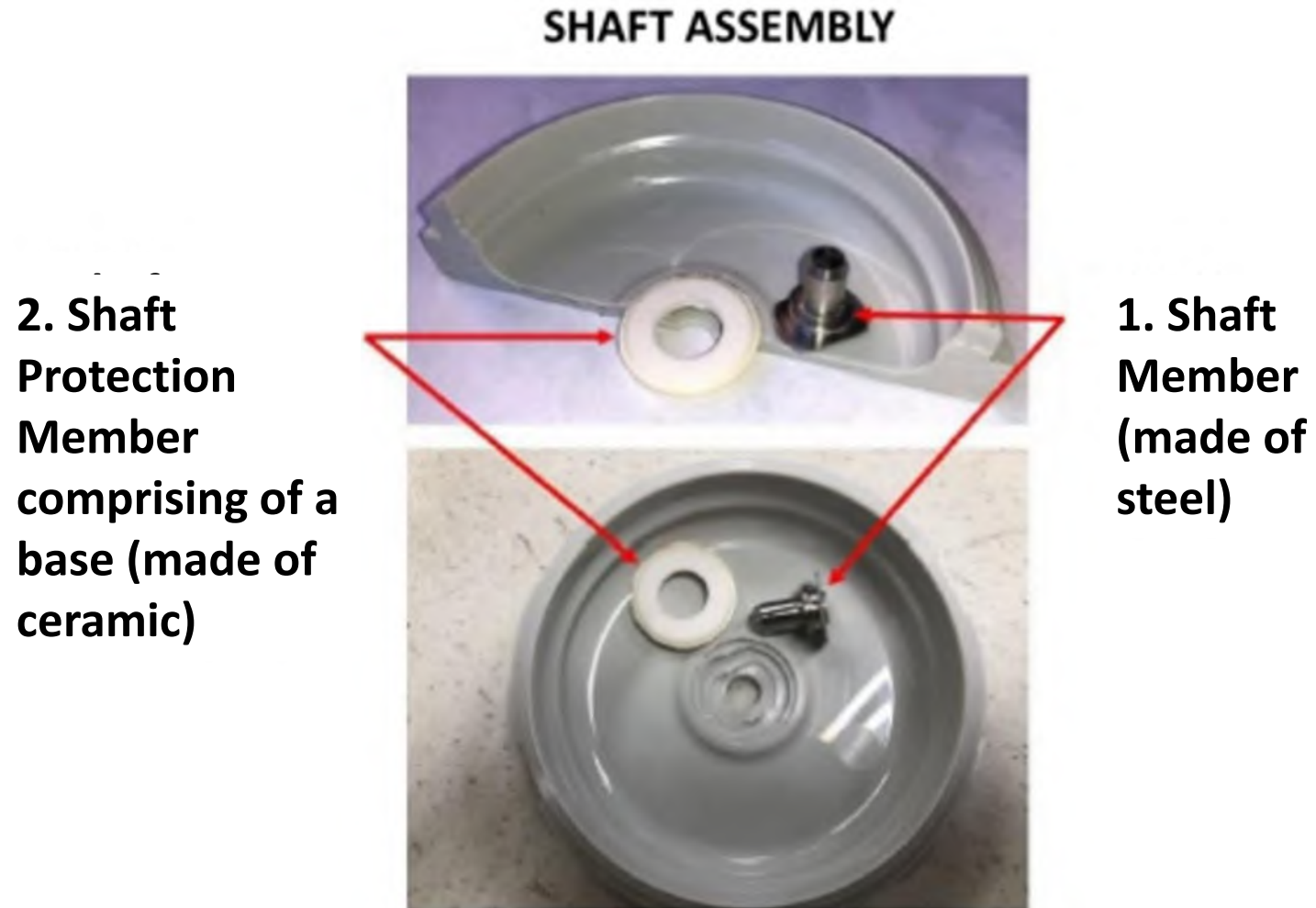




6. Upper Surface of IH

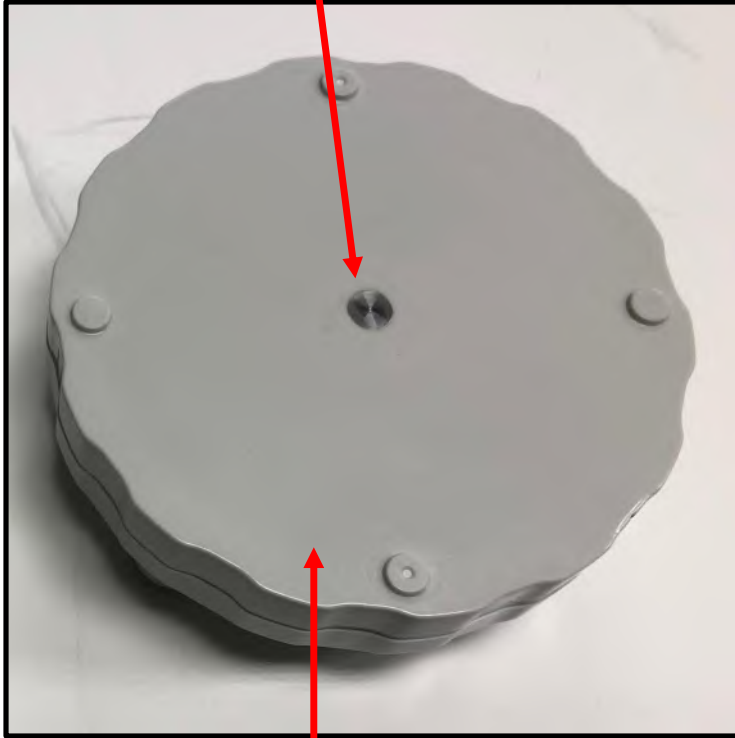
Magnetic Impeller





3. Shaft Member (extends though top surface and bottom surface of Base of Jet Assembly)

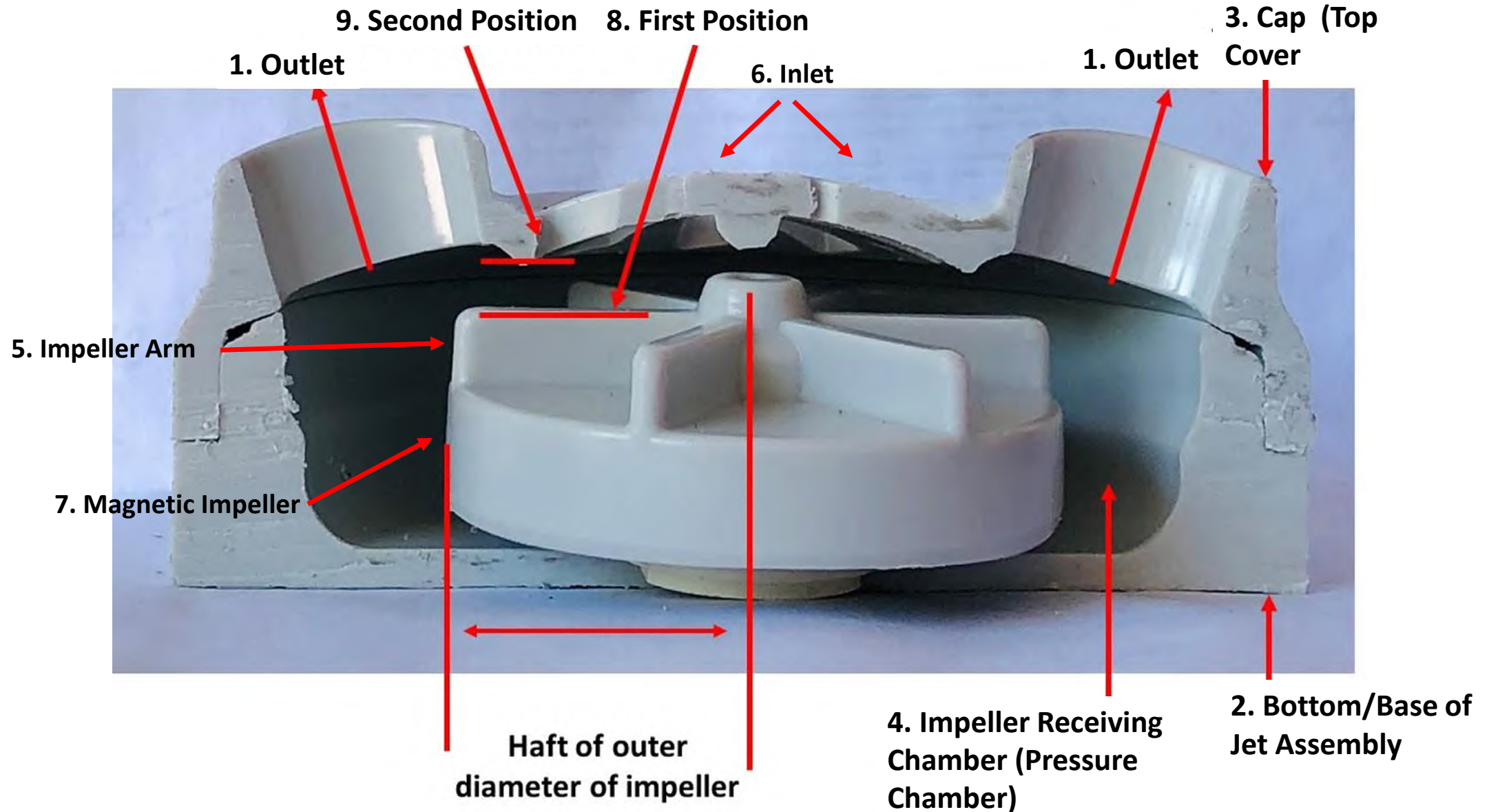
3. Shaft Member (made of steel)

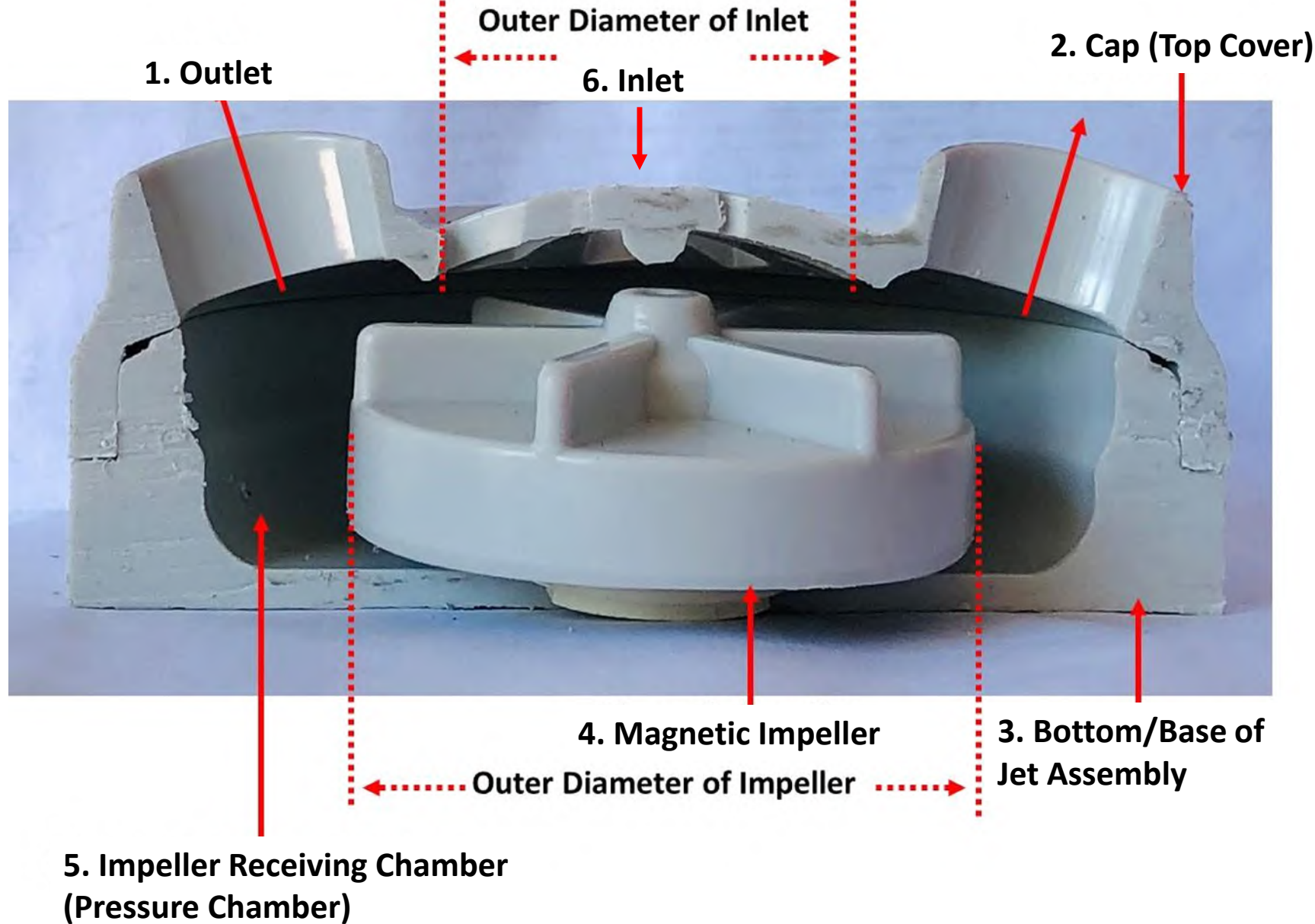


1. Outer surface of Base of Jet Assembly



2. Inner surface of Base of Jet Assembly





prospadepot.com/ecojet-magnetic-ii.html

Norred law Time Sh... Dashboard - MyCase

PSD™
Pedicure Spa & Salon Furniture Wholesaler

(714) 444-4144

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US FIND DEALERS



HOME / ACCESSORIES / WHIRLPOOL JET / ECOJET MAGNET DRIVE JET / ECOJET II MAGNETIC DRIVE

Product Code: Ecojet II Magnetic Drive

ECOJET II MAGNETIC DRIVE

Add to Wishlist Add to Compare

f t i e + 1



DETAILS

Patented Ecojet II with Magnetic-Drive will provide a strong soothing whirlpool, easy to clean and extremely reliable. Use together with PSD Disposable Liner will bring sanitary pedicure service to a whole new level. The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized and Utilities Patented (8,272,079). This magnetic jet is assembled and tested in the U.S.A.

Retail box includes:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card

RELATED PRODUCTS

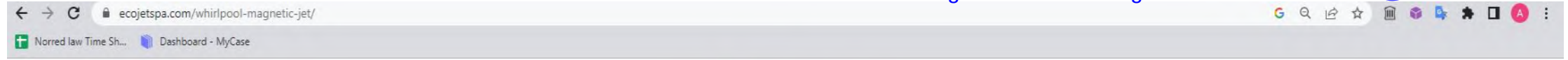
VIDEO

Ecojet Magnetic Drive Jet Commercial

Watch later Share

Watch on YouTube

www.ecojetspa.com



HOME PRODUCTS CONTACT INFO FIND DEALERS SUPPORT

Universal Whirlpool Magnetic Jet System

(Designed for Pedicure Spa Chairs).

The Ecojet Magnetic Drive Jet takes "sanitary" to the next level. This jet system is highly efficient and reliable. With a one- year warranty, Ecojet U.L recognized, assembled & tested in the USA.

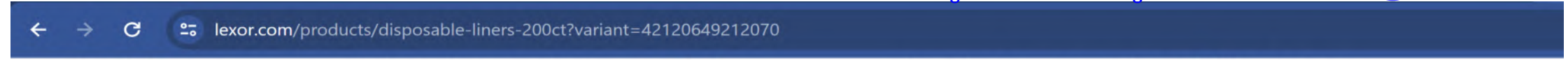
This kit is designed with advanced technology that increases the product longevity and durability. Our goal is to create the best performing whirlpool jet among competitors and most spa chairs in the market is now coming with universal fitment. The Ecojet Magnetic Drive Jet is now comes with universal fitment that fits most magnetic jets cutout for the Ecojet Universal Adapter is 3.5 inches. Any larger opening will have leakages (Please reference manual for further instructions).

The Ecojet MD package Includes:

- Ecojet® MD Magnetic Motor
- Replacement Bushing Kit
- Motor Mounting Lever
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet® Cap Cover
- AC Power Cord

Home About Us Find Dealers Terms & Conditions

Get in touch with us ->

age Starts At **\$2495****FREE SHIPPING** For All Orders Over **\$5000**Financing Interest Rate As Low As **1%** With Credit Key

PEDICURE CHAIRS

PROMOTIONS

SPECIAL FEATURES

SALON FURNITURE

PARTS & ACCESSORIES

SHOWROOMS



Disposable Liners (200ct)

EcoJet

\$25.00

From \$2.31/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

ADD TO CART

BUY IT NOW


APPLY FOR FINANCING

SEE PROMOS

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.


← → ↻ ⓘ Not secure | lxsalons.com/product/liberte/

 **Lexor**[®]
THE KEY TO SALON SUCCESS.


Home Pedi-Spa Furniture Parts Promo Explore

Smart Features


SHARE



ECOJET[™] Magnetic Drive
Distinctively designed to operate stronger, quieter and cooler to withstand long hours of usage in a typical nail salon, Ecojet is UL listed and backed with 2 U.S. utility patents giving you and your clients confidence in having a sanitary and relaxing pedicure service.



ECOJET[™] Disposable Liner
Your clients will appreciate the extra care taken to bring them a more sanitary experience from using disposable liners.

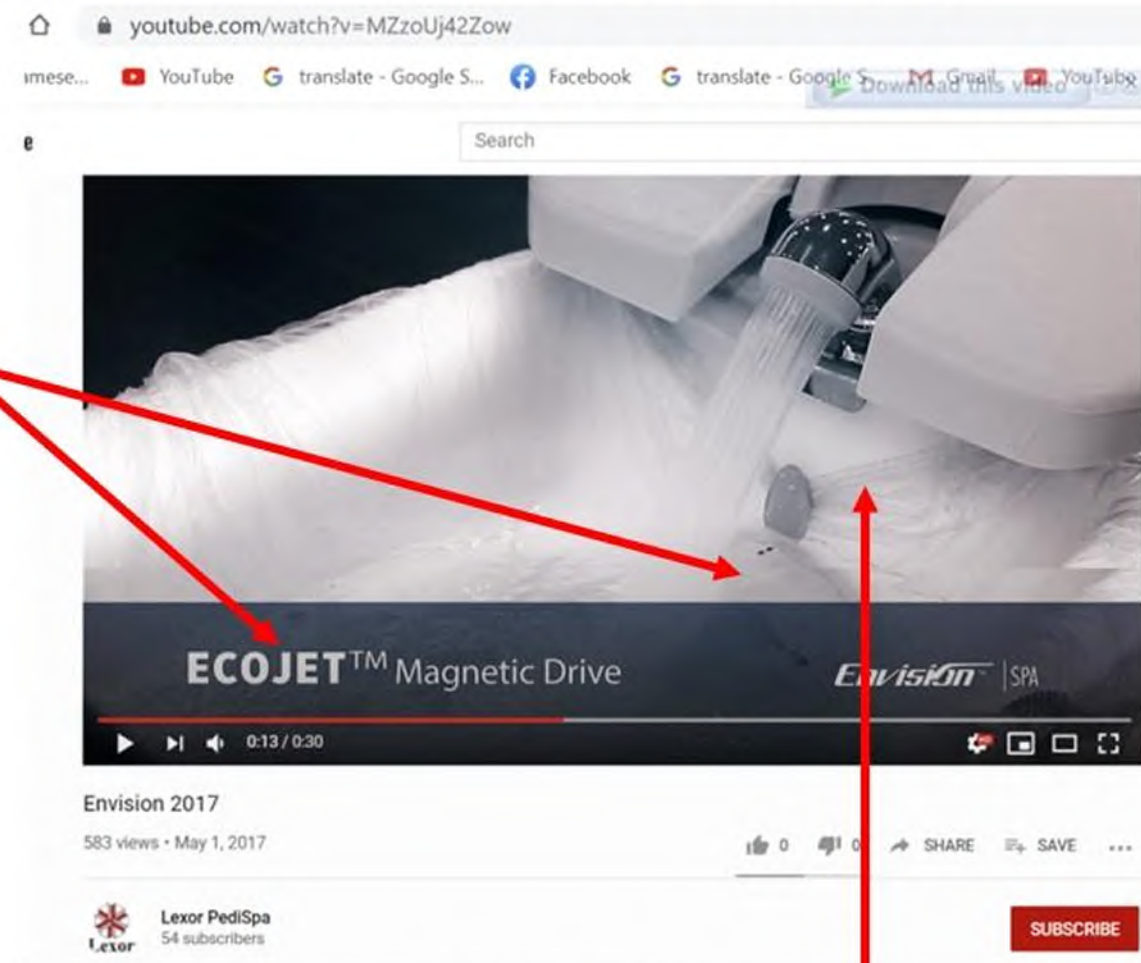


NEW EcoAir[™] Ver
Easily attach your salt and nail stations with

Liner

<https://www.youtube.com/watch?v=MZzoUj42Zow> (Second 13 shows EcoJet)

EcoJet

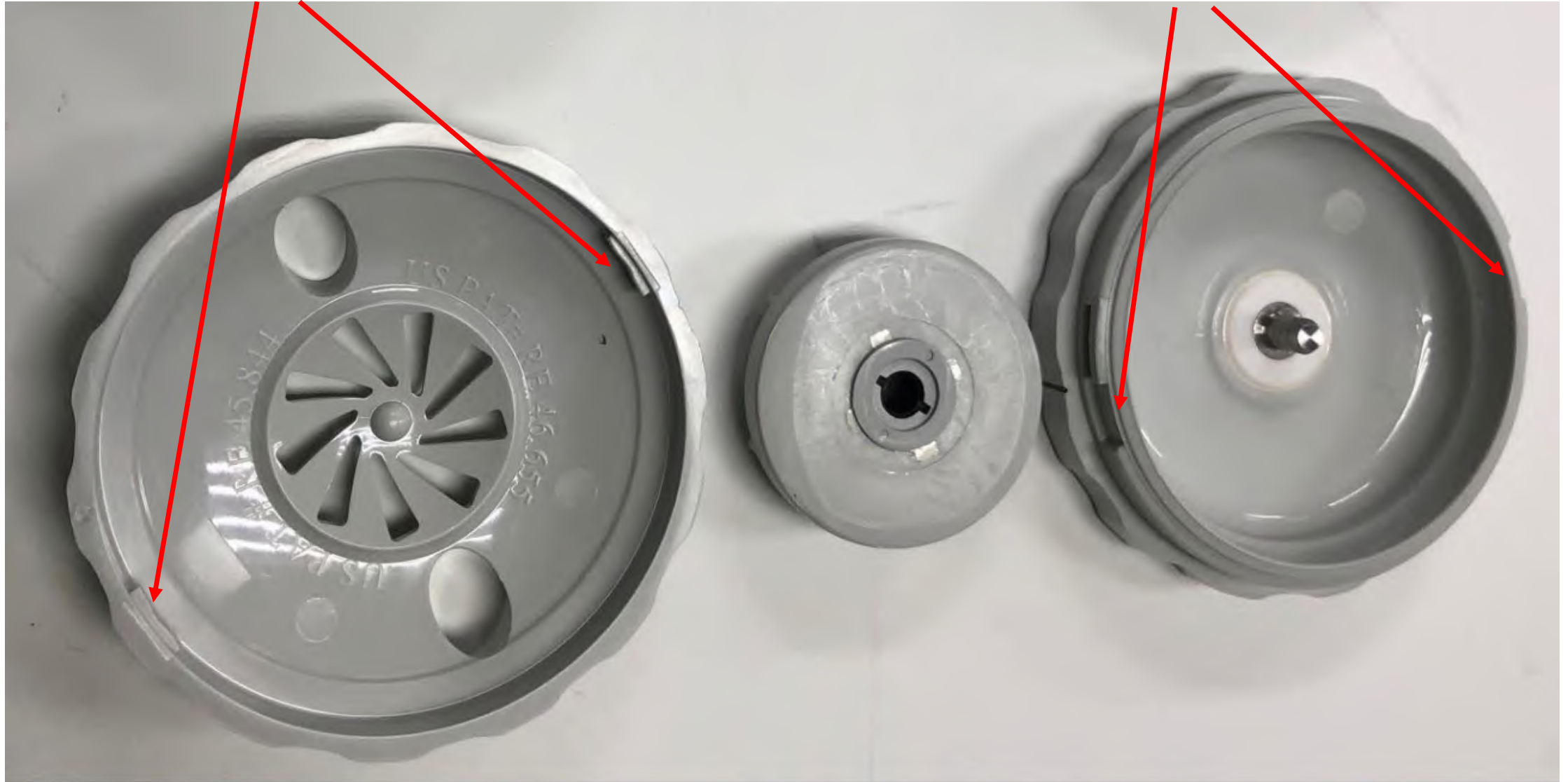


(Cropped on Oct 19, 2020)

Liner

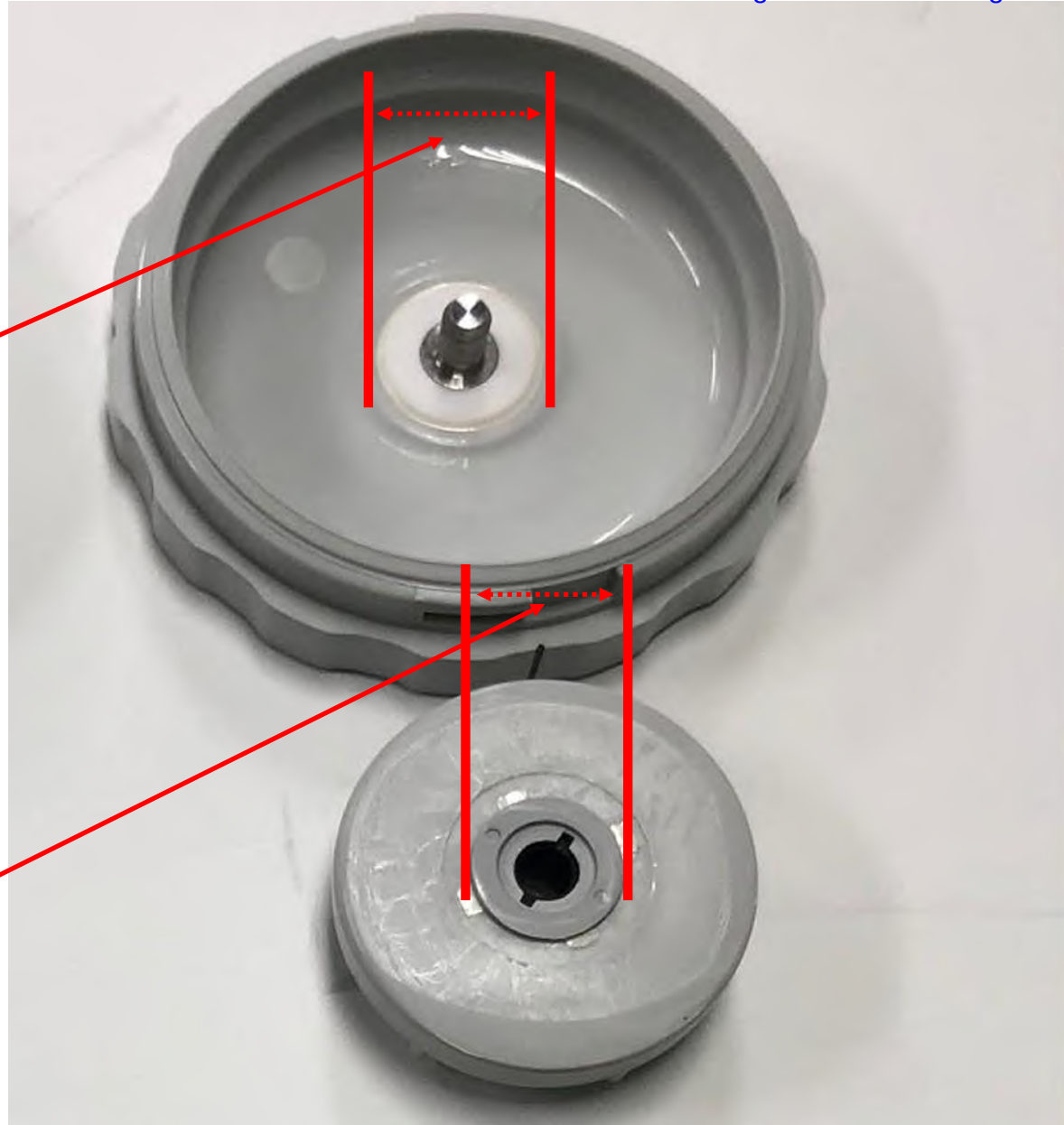
1. Engagement Member

1. Engagement Member



**1. Outer diameter
of Shaft Protection
Member**

**2. Outer diameter
of Outer Bearing
Member**



lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES


ELITE Pedicure Chair


MODEL CODE | SKU : 100079

SALE


\$2,495.00

MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA




BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a mat



lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (*for massage system & seat positioning*)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (*optional*)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

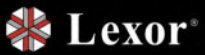
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 📄 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW




PRIVÉ Lounge Pedicure Chair


PROMOTION

\$4,495.00

MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: *IVORY*

BASE COLOR: *BLACK MOONSTONE*

MODEL: PRIVÉ Lounge Pedicure Chair ▾

QTY. - 1 +

Order a complete 5-piece package with a matching n

ADD TO CART

BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/prive-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 71
- HEIGHT (Upright/Reclined): 84
- WIDTH (Trays Closed/Open): 34/49
- Weight (lb.): 350
- Water Capacity (gal.): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495**

FREE SHIPPING For All Orders Over **\$5000**



PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,900.00~~

From \$231/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: DARK WALNUT

MODEL ENVISION Pedicure Chair

QTY. - 1 +

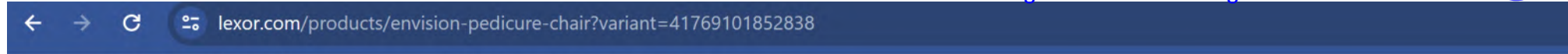
ADD TO CART

BUY IT NOW

APPLY FOR FINANCING

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



FREE SHIPPING For All Orders Over \$5000

Financing Interest Rate As Low As 1% With Credit Key


[PEDICURE CHAIRS](#)
[PROMOTIONS](#)
[SPECIAL FEATURES](#)
[SALON FURNITURE](#)
[PARTS & ACCESSORIES](#)
[SHOWROOMS](#)
**SPECIFICATION**

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests *(for easy access)*
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

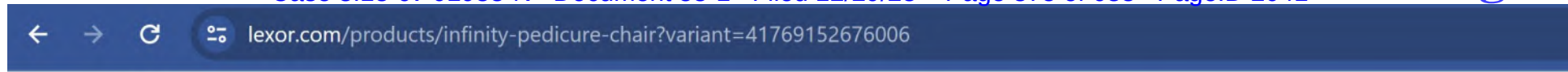
// DIMENSIONS *(in.)*

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight *(lb.)*: 260
- Water Capacity *(gal.)*: 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE



INFINITY Pedicure Chair

SALE

\$1,995.00

MSRP: ~~\$2,795.00~~

From \$185/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART

BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

← → ↻ 🔍 lexor.com/products/infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

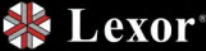
Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS


SPECIFICATION

<p>// DESIGN</p> <ul style="list-style-type: none"> • AURORA® Color-changing LED Bowl • Elegant Burlwood & Chrome Accents • Foldable Manicure Trays with Cup/Phone Holders • Lift-up Arm-rests (<i>for easy access</i>) • Acetone-resistant ULTRALEATHER® Chair Top • Acetone-resistant Laminated Base & Gel Bowl • Durable Gel-coated Marble Composite Spa Base • Flushed-concept Handbag Hooks <p>// TECHNOLOGY</p> <ul style="list-style-type: none"> • ECOJET® Shaft-less® Universal Whirlpool Jet • AUTO-FILL™ Water Auto-Stop Sensor 	<p>// DIMENSIONS (in.)</p> <ul style="list-style-type: none"> • LENGTH (Upright/Reclined): 53/74 • HEIGHT (Upright/Reclined): 56/52 • WIDTH (Trays Closed/Open): 31/47 • Weight (lb.): 260 • Water Capacity (gal.): 4 <p>// ELECTRICAL</p> <p>Jet Motor: 120VAC at 85W 60Hz</p> <p>Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5</p> <p>Discharge Pump</p> <p>MOTOR: 120V AT 85W 60Hz</p> <p>MAX VERTICAL LIFT: 3 ft.</p> <p>FLOWRATE: 500 GPH At Floor Level</p> <p>Power Source: 115VAC, 60Hz, 15A</p> <p>(Power needed per spa chair: 6 Amp)</p>
--	---

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774


BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**


 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO




LIBERTÉ Pedicure Chair

SALE
\$2,395.00
MSRP: ~~\$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL LIBERTÉ Pedicure Chair ▾

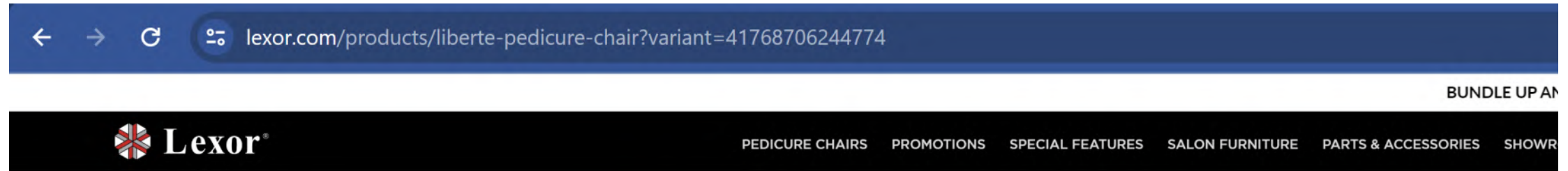
QTY. - 1 +

Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (*in.*)

- LENGTH (**Upright**/Reclined): **53/74**
- HEIGHT (**Upright**/Reclined): **56/52**
- WIDTH (**Trays Closed**/Open): **31/47**
- **Weight** (*lb.*): **260**
- **Water Capacity** (*gal.*): **4**

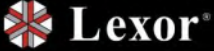
// ELECTRICAL


Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump: MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(*Power needed per spa chair: 6 Amp*)

LEXOR® CARE

← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

BUNDLE L

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRESTIGE Pedicure Chair

SALE


\$2,495.00

MSRP: ~~\$3,900.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



PEDI-BOWL COLOR: WHITE PEARL

MODEL PRESTIGE Pedicure Chair ▾

QTY. - 1 +

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

← → ↻ lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

L 53\"/74\" (Upright / Reclined)

W 31\"/47\" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz


MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****


Lexor®**SALE**MSRP: ~~\$2,995.00~~

From \$203/month with  Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: *ESPRESSO*

MODEL LUMINOUS Pedicure Chair ▾

QTY.	-	1	+
------	---	---	---

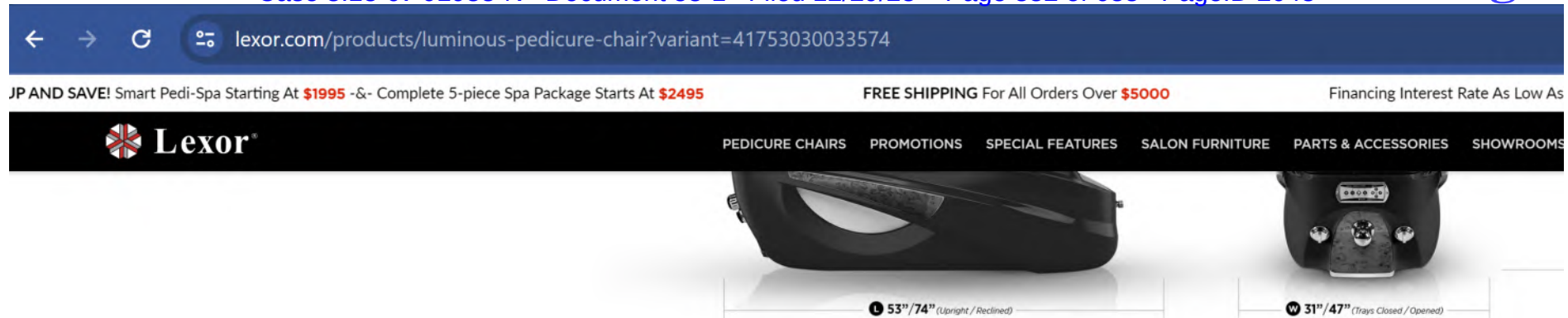
Order a complete 5-piece package with a matching i

ADD TO CART

BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (*for massage system & seat positioning*)
- 4-way Powered Chair Top

// DIMENSIONS (*in.*)

- LENGTH (**Upright/Reclined**): 53/74
- HEIGHT (**Upright/Reclined**): 56/52
- WIDTH (**Trays Closed/Open**): 31/47
- Weight (*lb.*): 260
- Water Capacity (*gal.*): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

(12) **United States Patent**
Le et al.

(10) **Patent No.:** **US 10,215,178 B2**
(45) **Date of Patent:** **Feb. 26, 2019**

(54) **BEARING AND SHAFT ASSEMBLY FOR JET ASSEMBLIES**

(71) Applicants: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US)

(72) Inventors: **Kevin Le**, Richland Hills, TX (US);
Thanh Le, Grand Prairie, TX (US)

(73) Assignee: **Luraco, Inc.**, Arlington, TX (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/854,747**

(22) Filed: **Dec. 26, 2017**

(65) **Prior Publication Data**

US 2018/0119699 A1 May 3, 2018

Related U.S. Application Data

(63) Continuation of application No. 13/923,364, filed on Jun. 20, 2013, now Pat. No. 9,926,933.

(51) **Int. Cl.**
A61H 33/00 (2006.01)
F04D 13/02 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC **F04D 13/024** (2013.01); **F04D 13/026** (2013.01); **F04D 13/0633** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC .. F04D 13/026; F04D 13/024; F04D 13/0633;
F04D 13/064; F04D 29/0465;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,506,886 A 5/1950 Okulitch et al.
2,951,689 A 9/1960 Asp et al.
(Continued)

FOREIGN PATENT DOCUMENTS

CA 1286755 C 7/1991
CN 203396450 U 1/2014
(Continued)

OTHER PUBLICATIONS

ANS Gspa F Pedicure Spa (<http://buynailsdirect.com/nails-salon-pedicure-spas/glass-sink-spas/ans-gspa-f-pedicure-spa.html>), Aug. 15, 2016.

(Continued)

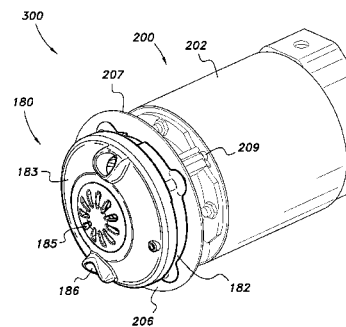
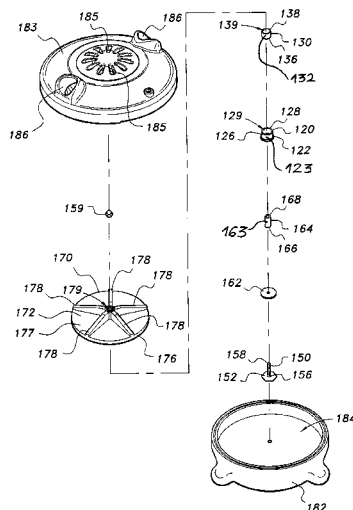
Primary Examiner — Nathan C Zollinger

(74) *Attorney, Agent, or Firm* — Hoang Steve Ngo, Esq.

(57) **ABSTRACT**

An improved bearing and shaft assembly includes a bearing assembly having an outer bearing member and an inner bearing member, and a shaft assembly having a shaft member, a shaft protection member, and a locking mechanism. The outer bearing member has a cavity for receiving the inner bearing member, and fits within a cavity of an impeller. The shaft assembly is secured within a housing of a jet assembly. The shaft protection member has a cavity for receiving the shaft member. The shaft protection member fits within the cavity of the inner bearing member. Also, a jet assembly, which includes the improved bearing and shaft assembly, may be coupled to a motor assembly. The jet assembly further includes the housing that includes at least one inlet aperture and at least one outlet aperture, and an impeller positioned within a cavity of the housing.

30 Claims, 9 Drawing Sheets



US 10,215,178 B2

Page 2

- (51) **Int. Cl.**
F04D 13/06 (2006.01)
F04D 25/02 (2006.01)
F04D 25/06 (2006.01)
F04D 29/046 (2006.01)
F04D 29/047 (2006.01)
- (52) **U.S. Cl.**
CPC **F04D 25/026** (2013.01); **F04D 29/047** (2013.01); **F04D 29/0465** (2013.01); **A61H 33/0087** (2013.01); **F04D 13/064** (2013.01); **F04D 25/06** (2013.01)
- (58) **Field of Classification Search**
CPC F04D 29/047; F04D 25/06; F04D 25/026; **A61H 33/0087**
USPC 417/420
See application file for complete search history.
- (56) **References Cited**
- U.S. PATENT DOCUMENTS**
- | | | | | | |
|-----------|-----|---------|-----------------|-------------|--|
| 2,958,517 | A | 11/1960 | Harker et al. | | |
| 3,089,514 | A * | 5/1963 | Sudmeier | F16L 55/00 | |
| | | | | 137/563 | |
| 3,198,125 | A * | 8/1965 | Yuza | H02K 49/108 | |
| | | | | 310/104 | |
| 3,299,819 | A | 1/1967 | McCoy | | |
| 3,411,450 | A | 11/1968 | Clifton | | |
| 3,572,651 | A | 3/1971 | Harker | | |
| 3,630,645 | A | 12/1971 | Eheim | | |
| 3,932,068 | A | 1/1976 | Zimmermann | | |
| 3,941,517 | A | 3/1976 | Miyahara | | |
| 4,082,380 | A | 4/1978 | Klaus et al. | | |
| 4,115,040 | A | 9/1978 | Knorr | | |
| 4,135,863 | A | 1/1979 | Davis et al. | | |
| 4,226,574 | A * | 10/1980 | Villette | F04D 7/06 | |
| | | | | 310/104 | |
| 4,304,532 | A | 12/1981 | McCoy | | |
| 4,312,752 | A | 1/1982 | Malik | | |
| 4,331,496 | A * | 5/1982 | Orndorff, Jr. | B29C 70/08 | |
| | | | | 156/187 | |
| 4,513,735 | A | 4/1985 | Friedson et al. | | |
| 4,523,580 | A | 6/1985 | Tureauud | | |
| 4,569,337 | A | 2/1986 | Baumann et al. | | |
| 4,606,698 | A | 8/1986 | Clausen et al. | | |
| 4,716,605 | A | 1/1988 | Shepherd et al. | | |
| 4,875,497 | A | 10/1989 | Worthington | | |
| 4,982,606 | A | 1/1991 | Adamski et al. | | |
| 5,145,323 | A | 9/1992 | Farr | | |
| 5,238,369 | A | 8/1993 | Farr | | |
| 5,245,221 | A | 9/1993 | Schmidt et al. | | |
| 5,458,459 | A | 10/1995 | Hubbard et al. | | |
| 5,587,023 | A | 12/1996 | Booth | | |
| 5,980,112 | A * | 11/1999 | Matthews | F16C 17/14 | |
| | | | | 384/275 | |
| 5,992,447 | A | 11/1999 | Miller et al. | | |
| 6,732,387 | B1 | 5/2004 | Waldron | | |
| 7,168,107 | B2 | 1/2007 | Gruenwald | | |
| 7,393,188 | B2 | 7/2008 | Lawyer et al. | | |
- | | | | | | |
|--------------|------|---------|--------------------|-------------|--|
| 7,432,725 | B2 | 10/2008 | Sieh et al. | | |
| 7,440,820 | B2 | 10/2008 | Gougerot et al. | | |
| 7,593,789 | B2 | 9/2009 | Gougerot et al. | | |
| 8,214,937 | B2 | 7/2012 | Lawyer et al. | | |
| 8,296,874 | B2 | 10/2012 | Galati, Jr. et al. | | |
| 8,380,355 | B2 | 2/2013 | Mayleben | | |
| 8,531,048 | B2 | 9/2013 | Tran et al. | | |
| 8,657,583 | B2 | 2/2014 | Ward | | |
| 8,662,848 | B2 | 3/2014 | Tran | | |
| 8,936,444 | B2 | 1/2015 | Drechsel et al. | | |
| 9,220,657 | B2 | 12/2015 | Stauber et al. | | |
| 9,450,475 | B2 | 9/2016 | Zumstein et al. | | |
| 9,551,343 | B2 * | 1/2017 | Marks | A01K 63/047 | |
| 9,572,747 | B2 * | 2/2017 | Tran | H02K 7/11 | |
| 9,926,933 | B2 * | 3/2018 | Le | F04D 13/026 | |
| 2005/0045621 | A1 | 3/2005 | Chenier et al. | | |
| 2006/0096021 | A1 | 5/2006 | Hutchings | | |
| 2007/0101489 | A1 | 5/2007 | Hutchings | | |
| 2008/0035427 | A1 | 2/2008 | Fowler | | |
| 2008/0229819 | A1 | 9/2008 | Mayleben et al. | | |
| 2009/0064406 | A1 | 3/2009 | Lawyer et al. | | |
| 2009/0094736 | A1 | 4/2009 | Booth et al. | | |
| 2010/0074777 | A1 | 3/2010 | Laufer et al. | | |
| 2010/0239435 | A1 | 9/2010 | Le et al. | | |
| 2011/0004994 | A1 | 1/2011 | Le et al. | | |
| 2011/0116948 | A1 | 5/2011 | Yi et al. | | |
| 2011/0211982 | A1 * | 9/2011 | Marks | A01K 63/047 | |
| | | | | 417/420 | |
| 2011/0223047 | A1 | 9/2011 | Tran et al. | | |
| 2011/0253236 | A1 | 10/2011 | Le et al. | | |
| 2011/0305562 | A1 | 12/2011 | Matsunaga et al. | | |
| 2012/0156071 | A1 | 6/2012 | Hijikata et al. | | |
| 2013/0022481 | A1 | 1/2013 | Schob et al. | | |
| 2013/0263438 | A1 | 10/2013 | Burns et al. | | |
| 2015/0129039 | A1 | 5/2015 | Mulvaney | | |
| 2015/0227145 | A1 | 8/2015 | Reddy et al. | | |
| 2016/0097668 | A1 | 4/2016 | Vilag | | |
- FOREIGN PATENT DOCUMENTS**
- | | | | | |
|----|--------------|-----|---------|------------|
| CN | 104897239 | A | 9/2015 | |
| CN | 204758082 | U | 11/2015 | |
| CN | 105592834 | A | 5/2016 | |
| EP | 0149132 | | 5/1989 | |
| EP | 2676652 | | 12/2013 | |
| EP | 2997950 (A2) | | 3/2016 | |
| GB | 805539 | A * | 12/1958 | F16C 33/20 |
| GB | 2156218 | A | 10/1985 | |
| JP | H0678858 | | 3/1994 | |
| JP | 2007263028 | A | 10/2007 | |
| WO | WO2016059409 | A2 | 4/2016 | |
- OTHER PUBLICATIONS**
- Lexor Pedicure Spa User Manual (<http://uspedicurespa.com/resources/lexor/luminous-spa-pedicure-chair-owner-manual.pdf>), Aug. 15, 2016.
Maestro Pedicure Spa Owner's Manual (www.universalcompanies.com/FetchFile.ashx?id=c1571259-e567-4fcc-a079 . . .), Aug. 15, 2016.
- * cited by examiner

U.S. Patent

Feb. 26, 2019

Sheet 1 of 9

US 10,215,178 B2

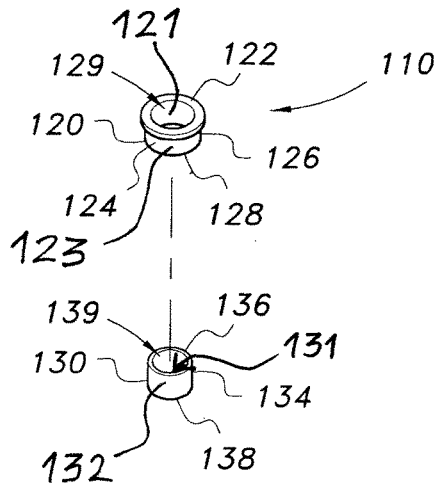


FIG. 1A

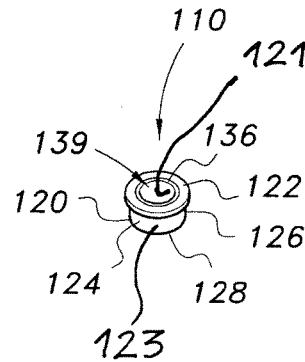


FIG. 1B

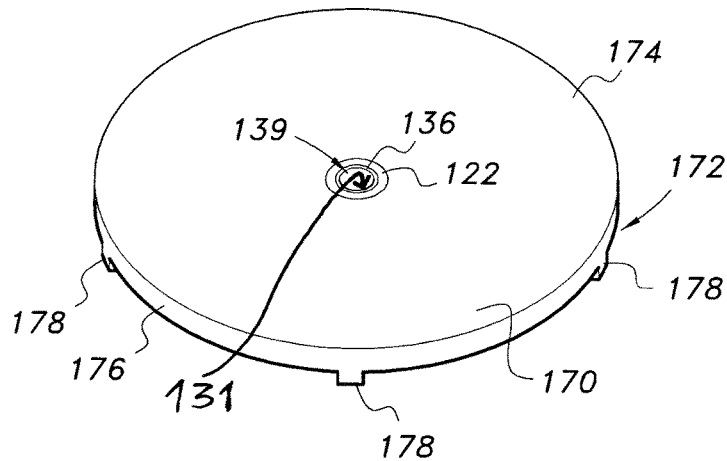


FIG. 2

U.S. Patent

Feb. 26, 2019

Sheet 2 of 9

US 10,215,178 B2

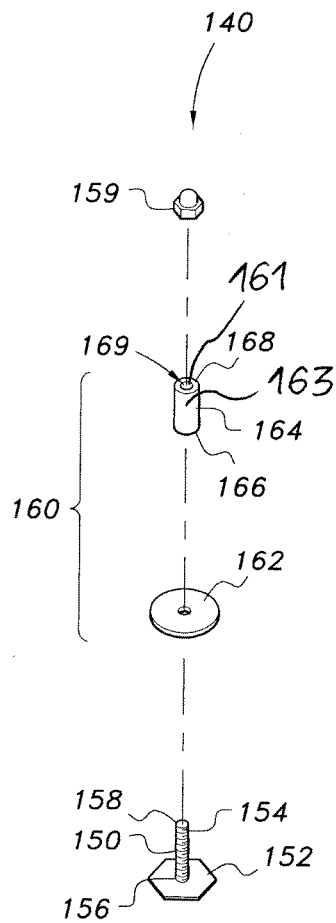


FIG. 3A

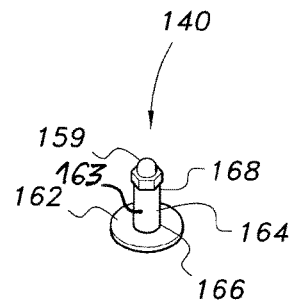


FIG. 3B

U.S. Patent

Feb. 26, 2019

Sheet 3 of 9

US 10,215,178 B2

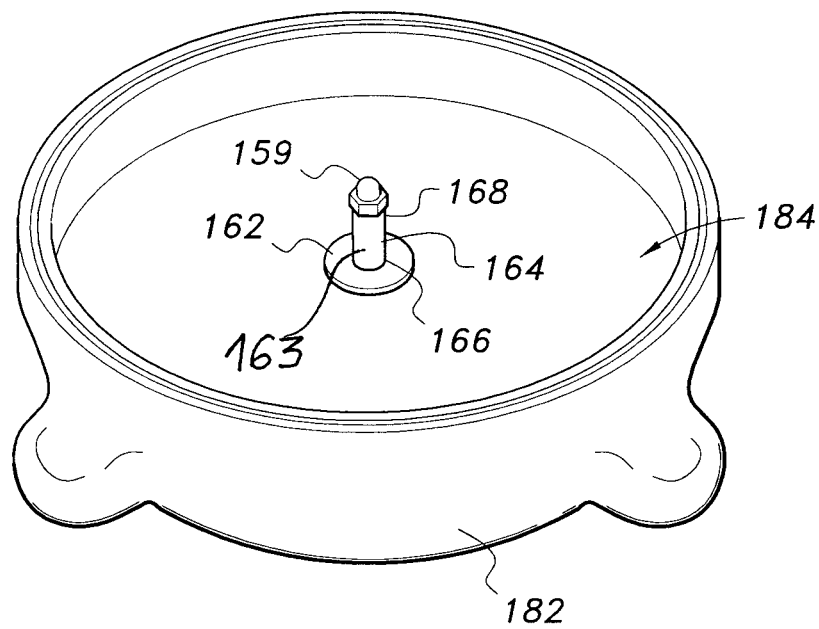


FIG. 4

U.S. Patent

Feb. 26, 2019

Sheet 4 of 9

US 10,215,178 B2

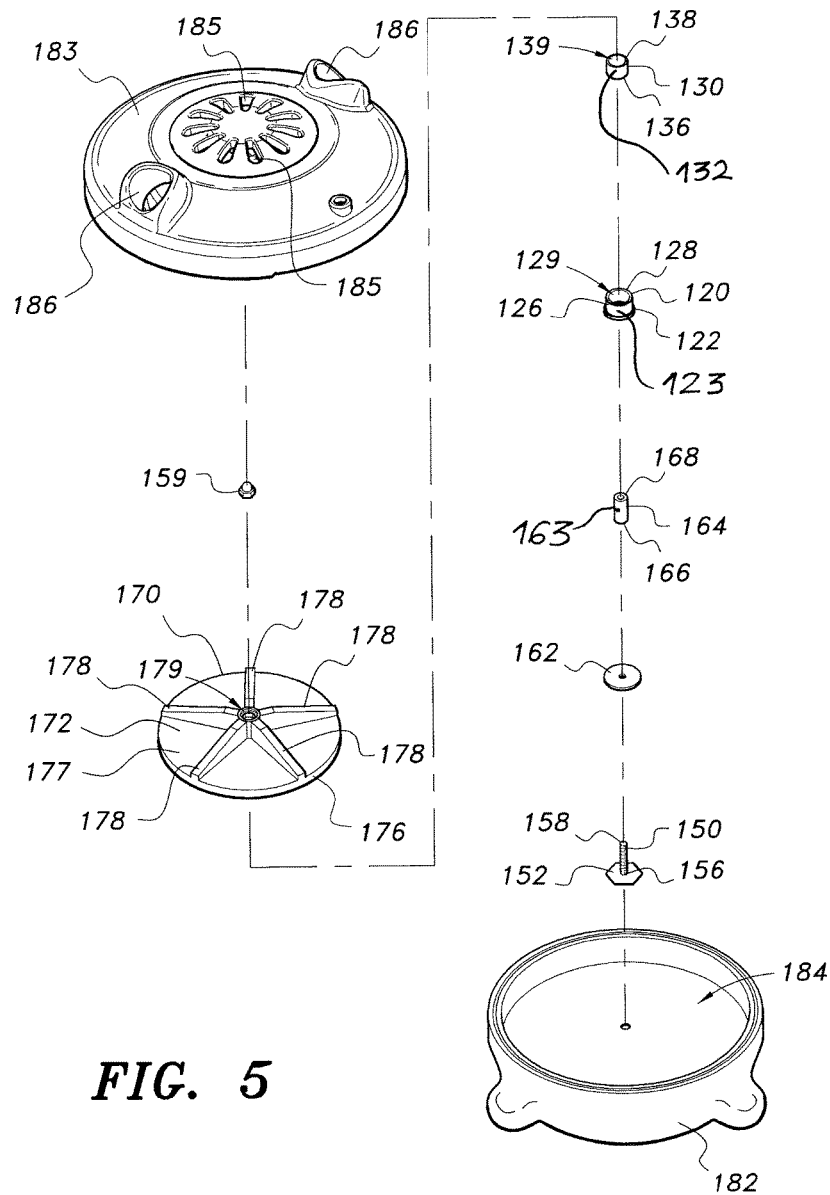


FIG. 5

U.S. Patent

Feb. 26, 2019

Sheet 5 of 9

US 10,215,178 B2

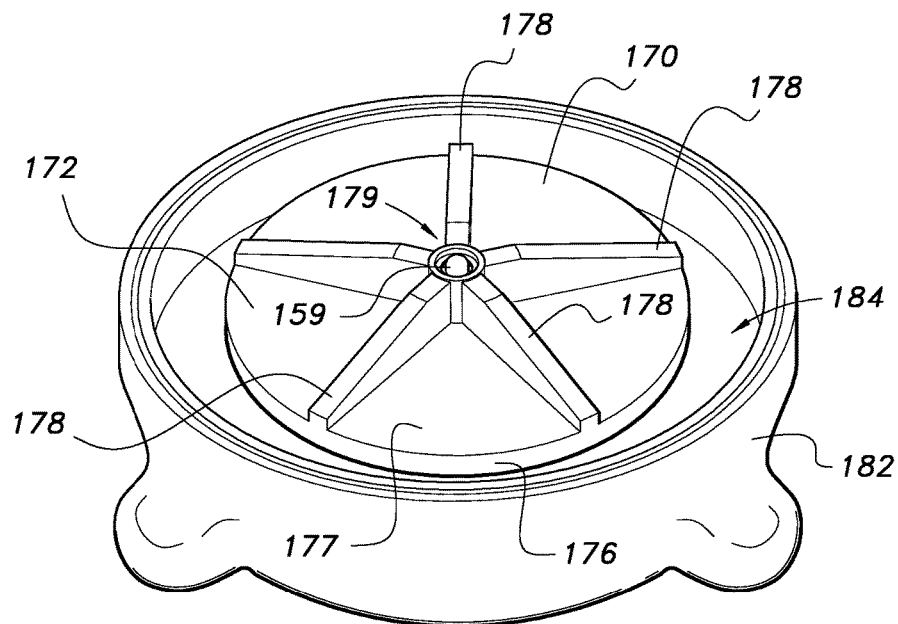


FIG. 6

U.S. Patent

Feb. 26, 2019

Sheet 6 of 9

US 10,215,178 B2

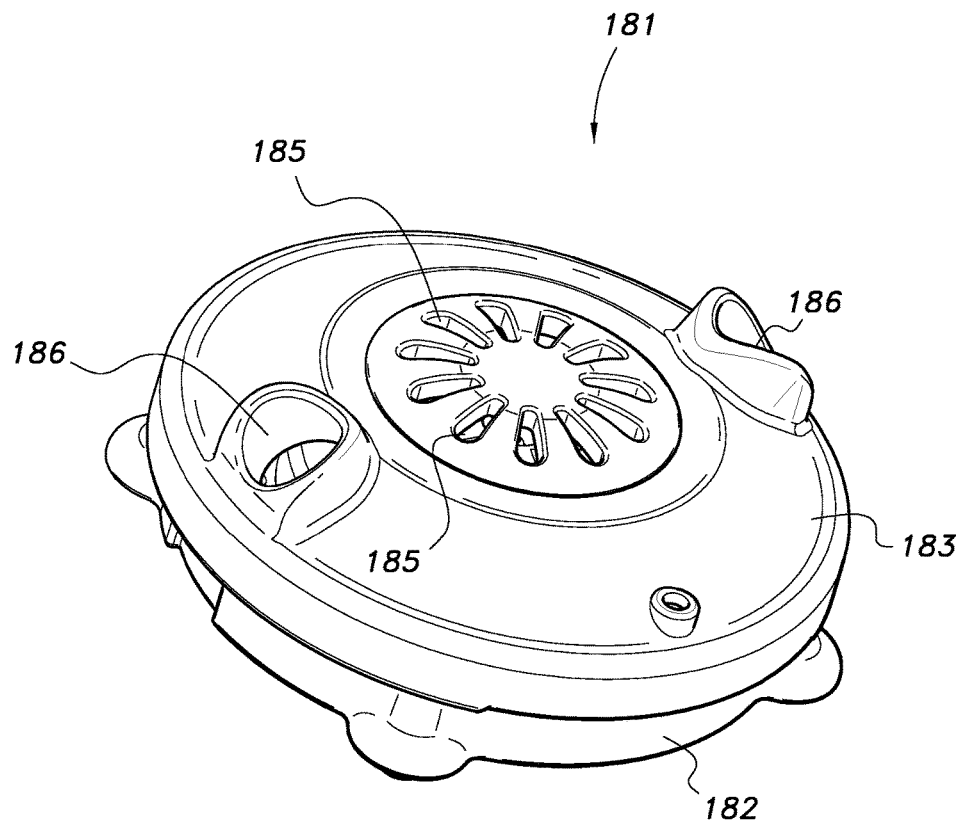


FIG. 7

U.S. Patent

Feb. 26, 2019

Sheet 7 of 9

US 10,215,178 B2

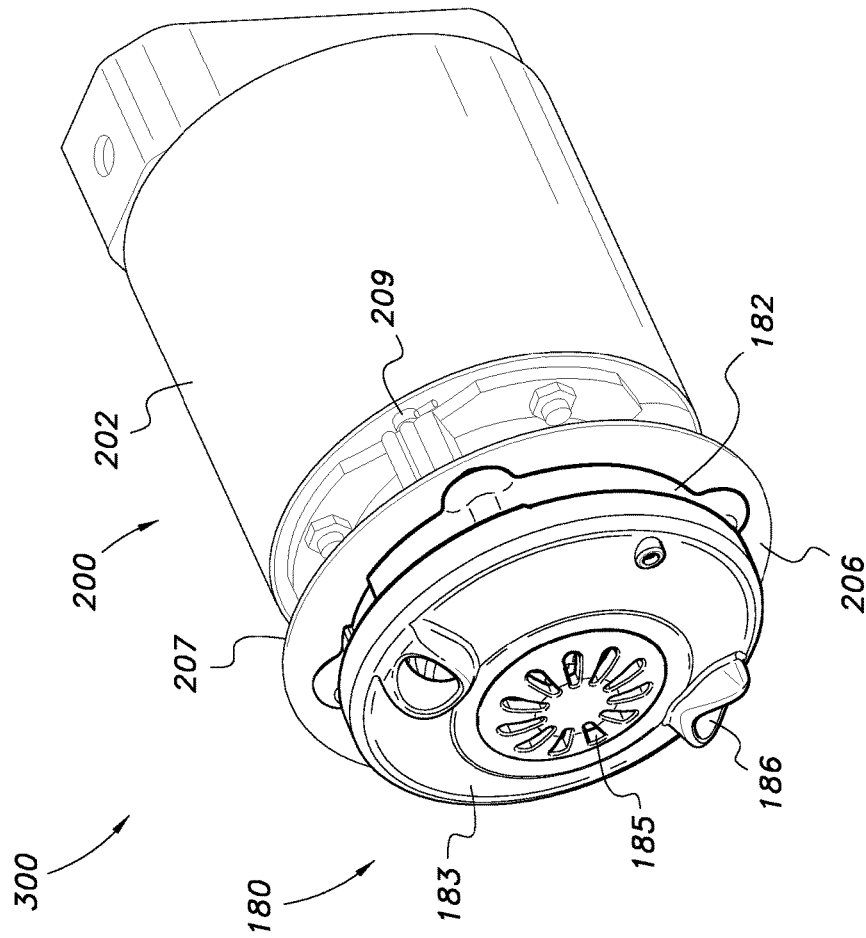


FIG. 8

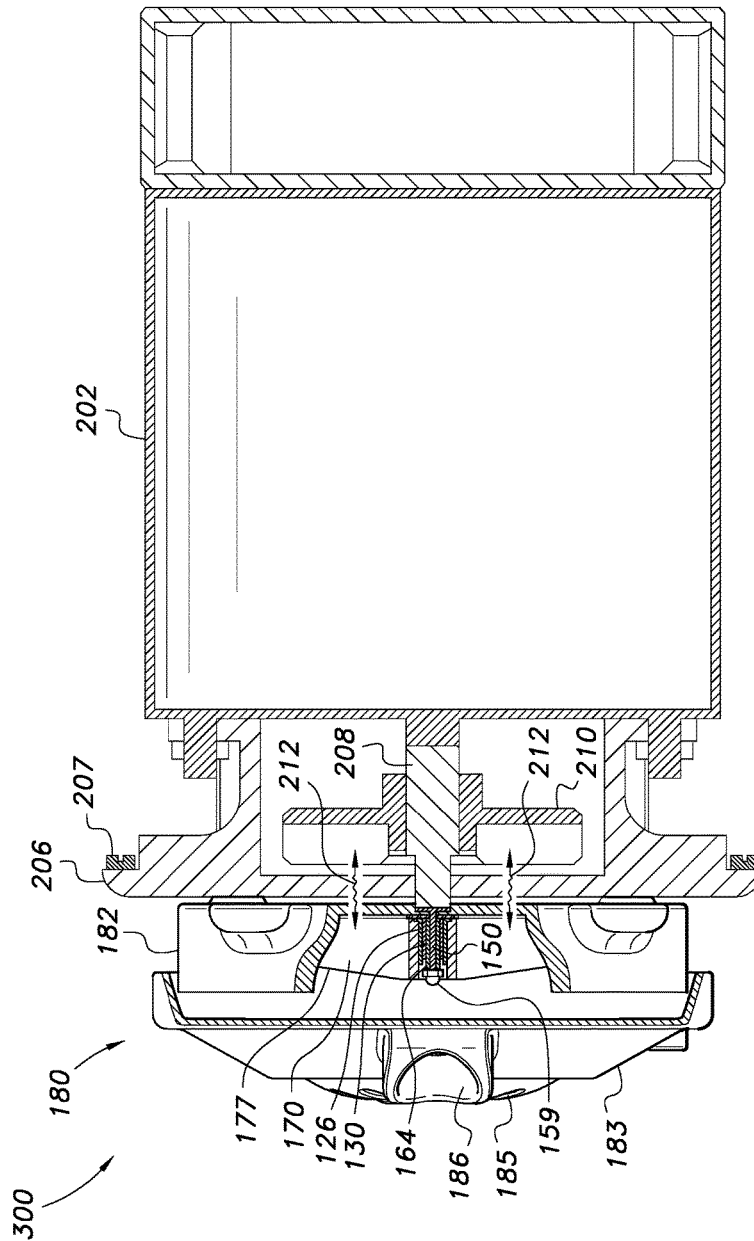


FIG. 9A

U.S. Patent

Feb. 26, 2019

Sheet 9 of 9

US 10,215,178 B2

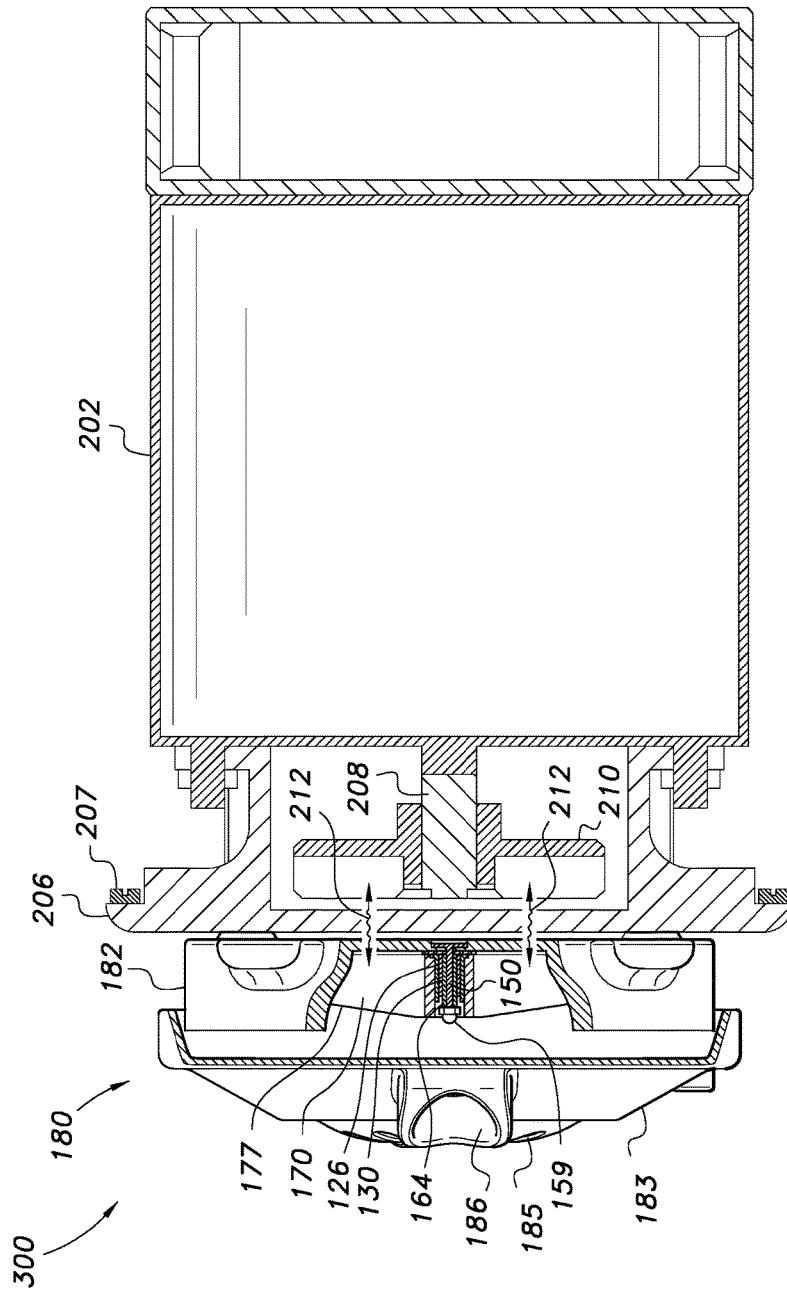


FIG. 9B

US 10,215,178 B2

1

BEARING AND SHAFT ASSEMBLY FOR JET ASSEMBLIES**CROSS-REFERENCE TO RELATED APPLICATION**

The present application is a continuation application of and claims the priority benefit of U.S. Nonprovisional patent application Ser. No. 13/923,364, filed on Jun. 20, 2013 and issued as U.S. Pat. No. 9,926,933 B2 on Mar. 27, 2018, which is incorporated herein by reference in its entirety.

BACKGROUND OF THE INVENTION**Field of the Invention**

The present invention generally relates to spa devices, components, and systems. More specifically, the present invention is directed to an improved bearing and shaft assembly for jet assemblies, to a jet assembly that includes the improved bearing and shaft assembly, to a pump, such as a magnetic coupling-type pump, comprising a motor assembly and a jet assembly that includes the improved bearing and shaft assembly, and to a method for dispensing a fluid using the improved bearing and shaft assembly.

Description of the Related Art

Spa devices, components, and systems are known in the art. Spa devices are used in commercial and recreational settings for hydrotherapy, massage, stimulation, pedicure, and bathing purposes. Typical spa devices include a motor that drives a pump to circulate water from the spa device. In particular, a shaft of the motor is used to directly mount an impeller, which is then used to circulate water into and out of the spa device. Since the motor may not operate wet, a seal or a series of seals may be required to prevent water from entering the motor. The seals will wear to the point where water will enter the motor and consequently, the entering water may cause the motor to burn out. At this point, the motor assembly may be replaced in order to continue operation. This is expensive and may take several hours in which to perform.

Additionally, because typical spa devices have extensive piping systems that are built into the spa device to transport water, the spa devices are traditionally difficult to clean. This results in downtime and complicated maintenance schedules to clean such spa devices. Furthermore, if a spa device has a light source associated with it, to replace or repair such a light source can be time consuming and complicated when the light source is not easily accessible.

In the spa application environment, water is commonly added with certain substances and/or products, such as salt, chemicals, sand, massage lotions, etc. Due to this fact, traditional bearings, such as ball bearings and metal bushings, will not be suitable for a long term and reliable operation. The presence of chemicals and sand, for example, will cause some or many currently available bearings to wear out quicker than normal and result in pump failures.

In addition, for magnetic coupling-type pumps, it is almost impossible to have a perfect alignment between the motor shaft axis and the impeller rotation axis. The imperfect alignment or misalignment will result in high vibration noise.

The present invention overcomes one or more of the shortcomings of the above described spa devices, components, and systems. The Applicant is unaware of inventions

2

or patents, taken either singly or in combination, which are seen to describe the present invention as claimed.

SUMMARY OF THE INVENTION

In one exemplary aspect, the present invention is directed to an improved bearing and shaft assembly for jet assemblies. The improved bearing and shaft assembly comprises a bearing assembly comprising an outer bearing member and an inner bearing member, and a shaft assembly comprising a shaft member, a shaft protection member, and a locking mechanism.

The outer bearing member preferably comprises a ring-like base and a cylindrical body extending upwardly from the ring-like base. The cylindrical body comprises a first end, a second end, and a cavity extending from the first end to the second end. The cavity is dimensioned and configured for receiving the inner bearing member. The outer bearing member is dimensioned and configured for fitting within a cavity of an impeller of a jet assembly.

The inner bearing member comprises a cylindrical body comprising a first end, a second end, and a cavity extending from the first end to the second end of the cylindrical body of the inner bearing member. The cavity of the cylindrical body of the inner bearing member is dimensioned and configured for receiving the shaft member and shaft protection member of the shaft assembly.

The shaft member comprises a base and a cylindrical body extending upwardly from the base of the shaft member. The cylindrical body of the shaft member comprises a first end and a second end. The shaft member is adapted for being secured within a housing of a jet assembly, such as the base of the shaft member being secured centrally within a cavity of the housing of the jet assembly.

The shaft protection member preferably comprises a ring-like base and a cylindrical body extending upwardly from the ring-like base of the shaft protection member. The cylindrical body of the shaft protection member comprises a first end, a second end, and a cavity extending from the first end to the second end of the cylindrical body of the shaft protection member. The cavity of the cylindrical body of the shaft protection member is dimensioned and configured for receiving the cylindrical body of the shaft member. The cylindrical body of the shaft protection member is dimensioned and configured for fitting within the cavity of the cylindrical body of the inner bearing member.

The locking mechanism secures or locks the shaft member and shaft protection member in place during operational use.

In another exemplary aspect, the present invention is directed to a jet assembly that includes the improved bearing and shaft assembly. In addition to the improved bearing and shaft assembly, the jet assembly further includes a housing defining a cavity and comprising at least one inlet aperture disposed about the housing and dimensioned and configured to receive a fluid and at least one outlet aperture disposed about the housing and dimensioned and configured to output the fluid, and an impeller positioned within the cavity defined by the housing and configured to rotate within the cavity when a magnetic pole array from a motor assembly is driven such that rotation of the impeller causes the fluid to flow into the inlet aperture and out the outlet aperture. The jet assembly is adapted for being coupled to a motor assembly.

In an additional exemplary aspect, the present invention is directed to a pump, such as a magnetic coupling-type pump, comprising a motor assembly and a jet assembly that

US 10,215,178 B2

3

includes the improved bearing and shaft assembly. The motor assembly has a motor and a magnetic pole array such that the motor is configured to drive the magnetic pole array. The jet assembly is secured or coupled to the motor assembly. In addition to the improved bearing and shaft assembly, the jet assembly further includes a housing defining a cavity and comprising at least one inlet aperture preferably disposed about the housing and dimensioned and configured to receive a fluid and at least one outlet aperture preferably disposed about the housing and dimensioned and configured to output the fluid, and an impeller positioned within the cavity defined by the housing and configured to rotate within the cavity when the magnetic pole array from the motor assembly is driven such that rotation of the impeller causes the fluid to flow into the inlet aperture and out the outlet aperture.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid using the improved bearing and shaft assembly.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A is a perspective, exploded view of a bearing assembly of an improved bearing and shaft assembly according to the present invention;

FIG. 1B is a perspective, assembly view of the bearing assembly of FIG. 1A;

FIG. 2 is a perspective, assembly view of the bearing assembly of FIG. 1A positioned within a cavity of an impeller;

FIG. 3A is a perspective, exploded view of a shaft assembly of an improved bearing and shaft assembly according to the present invention;

FIG. 3B is a perspective, assembly view of the shaft assembly of FIG. 3A;

FIG. 4 is a perspective, assembly view of the shaft assembly of FIG. 3A positioned relative to a housing (without a front cover) of a jet assembly;

FIG. 5 is a perspective, exploded view of the bearing assembly of FIG. 1A, the shaft assembly of FIG. 3A, and a jet assembly (with a front cover);

FIG. 6 is a perspective, assembly view of the improved bearing and shaft assembly of FIGS. 1A and 3A, and the impeller and housing of the jet assembly (without the front cover) of FIG. 5;

FIG. 7 is a perspective, assembly view of the improved bearing and shaft assembly of FIGS. 1A and 3A, and the impeller and housing of the jet assembly (with the front cover) of FIG. 5;

FIG. 8 is a perspective view of a magnetic coupling-type pump according to the present invention, showing a jet assembly and a motor assembly coupled to one another;

FIG. 9A is a cross-sectional view of the magnetic coupling-type pump of FIG. 8; and

FIG. 9B is a cross-sectional view of another embodiment of a magnetic, coupling-type pump according to the present invention, showing a jet assembly and a motor assembly secured or coupled to or about one another.

It should be understood that the above-attached figures are not intended to limit the scope of the present invention in any way.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIGS. 1A-5 and in one exemplary aspect, the present invention is directed to an improved bearing and shaft assembly 100 for jet assemblies 180.

4

The improved bearing and shaft assembly 100 is comprised of a bearing assembly 110 comprising an outer bearing member 120 and an inner bearing member 130, and a shaft assembly 140 comprising a shaft member 150, a shaft protection member 160, and a locking mechanism 159.

As shown in FIGS. 1A, 1B and 2, the outer bearing member 120 and inner bearing member 130 perform as a bearing. The inner bearing member 130 absorbs vibration and noise when in use with other components of a jet assembly 180 or a pump 300, such as a magnetic coupling-type pump 300 and the like.

The outer bearing member 120 includes an inner surface 121, an outer surface 123, a base 122, preferably a ring-like base, and a cylindrical body 124 extending upwardly from the ring-like base 122. The ring-like base 122 has a predetermined thickness. The cylindrical body 124 has a first end 126, a second end 128, and a cavity 129 extending from the first end 126 to the second end 128. As shown in FIGS. 1A, 1B, 2 and 5, the cavity 129 is dimensioned and configured for receiving the inner bearing member 130. Preferably, when in use, the outer bearing member 120 and inner bearing member 130 are closely or tightly positioned relative to one another such that they form an effective seal. As shown in FIGS. 2 and 5, the outer bearing member 120 is dimensioned and configured for fitting, preferably closely or tightly fitting, within a centrally-disposed cavity 179 of an impeller 170, preferably a magnetic impeller and more preferably a planar magnetic impeller, of a jet assembly 180. Preferably and as best shown in FIG. 2, the ring-like base 122 of the outer bearing member 120 and first end 136 of the cylindrical body 134 of the inner bearing member 130 are substantially flush with the rear side 174 of the magnetic impeller 170 when the outer bearing member 120 and inner bearing member 130 are positioned within the centrally-disposed cavity 179 of the magnetic impeller 170. Preferably, the centrally-disposed cavity 179 of the magnetic impeller 170 is dimensioned and configured for effectively receiving the bearing assembly 110 prior to use, and also for effectively retaining the bearing assembly 110 when in use. The outer bearing member 120 is preferably made or manufactured of a plastic material or engineered plastics. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the outer bearing member 120.

The inner bearing member 130 includes an inner surface 131, an outer surface 132, and a cylindrical body 134 having first end 136, a second end 138, and a cavity 139 extending from the first end 136 to the second end 138. As shown in FIGS. 1A, 1B, 2, 5, 9A and 9B, the inner surface 131 of the inner bearing member 130 is preferably generally smooth to work or operate in concert with the shaft protection member 160, which is preferably polished or super smooth on its outer surface 163. As shown in FIGS. 1A, 1B, 2 and 5, the cavity 139 is dimensioned and configured for receiving the shaft member 150 and shaft protection member 160 of the shaft assembly 140. The inner bearing member 130 is preferably made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the inner bearing member 130.

As shown in FIGS. 3A, 3B, 4 and 5, the shaft assembly 140 includes the shaft member 150, the shaft protection member 160, and the locking mechanism 159.

As shown in FIGS. 3A, 3B and 5, the shaft member 150 includes a base 152 and a cylindrical body 154 extending upwardly from the base 152. The cylindrical body 154 has a first end 156 and a second end 158. As best shown in FIG.

US 10,215,178 B2

5

4, the shaft member 150 and shaft protection member 160 are secured within the housing 181, preferably in a central location within a cavity 184 of the housing 181, of the jet assembly 180 via the base 152 of the shaft member 150 being secured to the base 182 of the housing 181. The shaft member 150 is preferably made or manufactured of steel or a metal material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft member 150. Also, the shaft member 150 is preferably made or manufactured as a single piece. It is obvious to one of ordinary skill in the art that the shaft member 150 may be made or manufactured as multiple pieces.

The shaft protection member 160 includes an inner surface 161, an outer surface 163, a base 162, preferably a ring-like base, and a cylindrical body 164 extending upwardly from the ring-like base 162. The cylindrical body 164 has a first end 166, a second end 168, and a cavity 169 extending from the first end 166 to the second end 168. As shown in FIG. 3B, the cavity 169 is dimensioned and configured for receiving the cylindrical body 154 of the shaft member 150. The shaft protection member 160 is preferably made or manufactured of a hard material, such as ceramic or a ceramic-type material. It is obvious to one of ordinary skill in the art that other suitable materials may be used in the making or manufacturing of the shaft protection member 160. Also, the shaft protection member 160 is preferably polished or super smooth on its outer surface 163. Further, the shaft protection member 160 is preferably made or manufactured as two pieces. It is obvious to one of ordinary skill in the art that the shaft protection member 160 may be made or manufactured as a single piece.

As shown by FIGS. 3A, 3B, 4-6, 9A and 9B and when in use, the locking mechanism 159 secures or locks the shaft member 150 and shaft protection member 160 in place during operational use. The locking mechanism 159 may be a locking nut that, when in use, is secured onto the second end 158 of the cylindrical body 154 of the shaft member 150.

As shown in FIGS. 2, 5 and 6, the magnetic impeller 170 has a "disc-like" configuration or shape, and includes a front side 172, a rear side 174, a sidewall 176, a circular array of arm members 178 positioned on the front side 172, and the centrally-disposed cavity 179 dimensioned and configured for receiving the outer bearing member 120, inner bearing member 130, shaft member 150, and shaft protection member 160. The centrally-disposed cavity 179 preferably extends from the front side 172 through to the rear side 174. The magnetic impeller 170 is configured to rotate about the shaft member 150 and shaft protection member 160. Preferably, the magnetic impeller 170 is formed in whole or in part of a magnetic pole array 177 that, as discussed below, interacts with magnetic pole array 210 of the motor assembly 200 to rotate the magnetic impeller 170 about the shaft member 150 and shaft protection member 160. As a non-limiting example, the magnetic impeller 170 may contain a magnetic plate within an exterior made or manufactured of rubber or a rubber-like material. It is obvious to one of ordinary skill in the art that the magnetic impeller 170 may be other types of magnetic impellers that is known in the art.

In use and as shown in FIGS. 4-6, 9A and 9B, the base 152 of the shaft member 150 and base 162 of the shaft protection member 160 may be secured preferably in a central location within the cavity 184 of the housing 181 of the jet assembly 180 of the magnetic coupling-type pump 300. The bearing assembly 110 may then be positioned in the cavity 179 of the magnetic impeller 170, which can then be positioned within the cavity 184 of the housing 181 of the jet assembly 180.

6

The locking mechanism or nut 159 can then be secured to the second end 158 of the cylindrical body 154 of the shaft member 150 to secure or lock the shaft member 150 and shaft protection member 160 in place during operational use. As best shown in FIGS. 9A and 9B, the base 162 of the shaft protection member 160 makes contact with the base 122 or first end of the outer bearing member 120 during operational use.

Referring to FIGS. 1A-7, in another exemplary aspect, the present invention is directed to a jet assembly 180 that includes the improved bearing and shaft assembly 100 (as described above). The jet assembly 180 is adapted for being secured or coupled to a motor assembly 200.

In addition to the improved bearing and shaft assembly 100, the jet assembly 180 further includes a housing 181 and an impeller 170 (as described above), preferably a magnetic impeller and more preferably a planar magnetic impeller.

As shown in FIGS. 4-7, the housing 181 of the jet assembly 180 includes a base 182, a front cover 183, the cavity 184 defined within the base 182 and front cover 183, at least one inlet aperture 185 dimensioned and configured to receive a fluid and preferably disposed on the front cover 183, and at least one outlet aperture 186 dimensioned and configured to output the fluid and preferably disposed on the front cover 183.

The magnetic impeller 170 is adapted for being positioned within the cavity 184 of the housing 181 and configured to rotate within the cavity 184 when a magnetic pole array 210 from the motor assembly 200 is driven such that rotation of the magnetic impeller 170 causes the fluid to flow into the inlet aperture 185 and out the outlet aperture 186.

Preferably when in use and as shown in FIGS. 8, 9A and 9B, the jet assembly 180 is positioned adjacent or in close proximity to the motor assembly 200 when the magnetic pump 300 is fully assembled. In that regard, the jet assembly 180 is preferably magnetically coupled to the motor assembly 200 when the jet assembly 180 is positioned adjacent or in close proximity to the motor assembly 200. Specially, the magnetic pole array 210 of the motor assembly 200 and the magnetic pole array 177 of the jet assembly 180 magnetically couple together the motor assembly 200 and the jet assembly 180.

Moreover, during operation of the motor assembly 200 as shown in FIGS. 9A-9B, the shaft member 150 of the shaft assembly 140 is stationary while the motor shaft member 208 is rotated such that the magnetic field 212 generated by the magnetic pole array 210 of the motor assembly 200 moves or fluctuates in accordance with the rotation of the magnetic pole array 210 of the motor assembly 200. This moving or fluctuating magnetic field 212 moves and/or causes rotation of magnetic pole array 177 of the magnetic impeller 170. Additionally, as discussed in greater detail below, rotation of the magnetic impeller 170 results in fluid being drawn towards the magnetic impeller 170 through inlet apertures 185 and such fluid to be propelled out of the jet assembly 180 through the outlet aperture 186.

Referring to FIGS. 1A-9B, in an additional exemplary aspect, the present invention is directed to a pump 300, preferably a magnetic coupling-type pump, comprising a motor assembly 200 and a jet assembly 180 (as described above) that includes the improved bearing and shaft assembly 100 (as described above). The jet assembly 180 is secured or coupled to the motor assembly 200.

As best shown in FIGS. 9A-9B, the motor assembly 200 includes a motor 202, a magnetic pole array 210 such that the motor 202 is configured to drive the magnetic pole array 210, a mounting housing member 206, a gasket 207, a motor

US 10,215,178 B2

7

shaft member **208** that is coupled to the magnetic pole array **210**, and a plurality of screws with wing nuts **209** to support the pump mounting. The mounting housing member **206** and gasket **207** preferably enclose all or a substantial portion of the magnetic pole array **210**, and help to keep fluids and/or substances away from the motor **202** and magnetic pole array **210** so that contamination and/or damage is reduced or prevented. The magnetic pole array **210** is formed of magnetic material and/or is magnetized in order to generate a magnetic field **212**.

In that regard, the motor assembly **200** may include and/or be coupled to a power source (not shown) that enables rotation of the motor shaft member **208**. Upon operation of the motor assembly **200**, the motor shaft member **208** is rotated such that the magnetic field **212** generated by the magnetic pole array **210** moves or fluctuates in accordance with the rotation of the magnetic pole array **210**.

In addition, when the magnetic coupling-type pump **300** is assembled, the jet assembly **180** is positioned adjacent or in close proximity to the mounting housing member **206** of the motor assembly **200**. The jet assembly **180** is preferably magnetically coupled to the motor assembly **200** when the jet assembly **180** is positioned adjacent or in close proximity to the mounting housing member **206**. The jet assembly **180** and mounting housing member **206** can be secured or coupled to one another by any method and/or device known to one of ordinary skill in the art.

Furthermore, the motor assembly **200** may further include an air channel (not shown), or air channel member (not shown). In that regard, the air channel includes an inlet (not shown) and outlet (not shown). The air channel, in part, enables the jet assembly **180** to produce a jet stream of fluid that includes an air mixture.

Additionally, the motor assembly **200** may further include sensors (not shown). The sensors may be positioned on a front facing surface (not shown), or annular flange, of the mounting housing member **206**. The sensors may include electrodes that act as level sensors that sense the level of fluid around the pump **300**. If the sensors detect that the level of fluid around the pump **300** is below a predetermined level or value, then the sensors can shut off the pump **300**. For example, if pump **300** is being used in a spa application, the sensors can detect the level of fluid in a basin in which the pump **300** is being used. If the fluid level is too low such that continued operation of pump **300** may cause damage to the pump, then sensors send a signal to motor assembly **200** to stop the motor assembly **200** from operating. Therefore, the sensors act as a safety mechanism that prevents the pump **300** from burning out if fluid levels are too low for proper functioning of pump **300**.

Although the sensors have been described as being associated with particular aspects of motor assembly **200**, it is contemplated that sensors can be associated with other and/or additional portions of motor assembly **200**. Additionally, in other embodiments sensors can be associated with jet assembly **180**. Furthermore, in other embodiments sensors can be associated with both motor assembly **200** and jet assembly **180**. Moreover, although two sensors are shown it is contemplated that one sensor or more than two sensors can be used to detect fluid levels around pump **300**.

In a further exemplary aspect, the present invention is directed to a method for dispensing a fluid using an improved bearing and shaft assembly **100** for a jet assembly **180**, the method comprising the steps of:

securing the improved bearing and shaft assembly **100** within a housing **181** of a jet assembly **180**,

8

wherein the improved bearing and shaft assembly **100** comprises a bearing assembly **110** and a shaft assembly **140**, wherein the bearing assembly **110** comprises an outer bearing member **120** and an inner bearing member **130**,

wherein the shaft assembly **140** comprises a shaft member **150**, a shaft protection member **160**, and a locking mechanism **159**,

wherein the outer bearing member **120** comprises an inner surface **121**, an outer surface **123**, and a cylindrical body **124** comprising a first end **126**, a second end **128**, and a cavity **129** extending from the first end **126** to the second end **128**, wherein the cavity **129** of the cylindrical body **124** is dimensioned and configured for receiving the inner bearing member **130**, wherein the outer bearing member **120** is dimensioned and configured for fitting within a cavity **179** of an impeller **170** of the jet assembly **180**,

wherein the inner bearing member **130** comprises an inner surface **131**, an outer surface **132**, and a cylindrical body **134** comprising a first end **136**, a second end **138**, and a cavity **139** extending from the first end **136** to the second end **138** of the cylindrical body **134** of the inner bearing member **130**,

wherein the shaft member **150** comprises a cylindrical body **154** comprising a first end **156** and a second end **158**,

wherein the shaft protection member **160** comprises an inner surface **161**, an outer surface **163**, and a cylindrical body **164** comprising a first end **166**, a second end **168**, and a cavity **169** extending from the first end **166** to the second end **168** of the cylindrical body **164** of the shaft protection member **160**, wherein the cavity **169** of the cylindrical body **164** of the shaft protection member **160** is dimensioned and configured for receiving the shaft member **150**, wherein the shaft protection member **160** is dimensioned and configured for fitting within the cavity **139** of the cylindrical body **134** of the inner bearing member **130**, and

wherein the locking mechanism **159** secures or locks the shaft member **150** and shaft protection member **160** in place during operational use;

causing rotation of the impeller **170** positioned within a cavity **184** defined by the housing **181** of the jet assembly **180**;

receiving the fluid through at least one input aperture **185** disposed about the housing **181** of the jet assembly **180**;

disturbing the fluid with the rotating impeller **170**; and

outputting the fluid through at least one output aperture **186** disposed about the housing **181** of the jet assembly **180**.

In addition, the method above may further include:

wherein the outer bearing member **120** further comprises a base **122** comprising a cavity, wherein the cylindrical body **124** of the outer bearing member **120** extends upwardly from the base **122**, wherein the cavity of the base **122** is dimensioned and configured for receiving the inner bearing member **130**,

wherein the shaft member **150** further comprises a base **152**, wherein the cylindrical body **154** of the shaft member **150** extends upwardly from the base **152** of the shaft member **150**, and

wherein the shaft protection member **160** further comprises a base **162** comprising a cavity, wherein the cylindrical body **164** of the shaft protection member **160** extends upwardly from the base **162** of the shaft protection member **160**, and wherein the cavity of said base **162** is dimensioned and configured for receiving the shaft member **150**.

Additionally, the method above may further include:

wherein the jet assembly **180** is adapted for being secured to a pump **300**, such as a magnetic coupling-type pump **300** and the like, wherein the impeller **170** is a magnetic impeller **170** comprising a magnetic pole array **177**, wherein a motor

US 10,215,178 B2

9

assembly **200** of the magnetic coupling-type pump **300** comprises a motor **202**, a magnetic pole array **210**, and a shaft member **208** adapted for being rotated such that a magnetic field **212** generated by the magnetic pole array **210** of the motor assembly **200** moves or fluctuates in accordance with the rotation of the magnetic pole array **210** of the motor assembly **200**, wherein the motor **202** drives the magnetic pole array **210** of the motor assembly **200**, wherein the magnetic field **212** moves and/or causes rotation of the magnetic pole array **177** of the magnetic impeller **170**, and wherein rotation of the magnetic impeller **170** results in the fluid being drawn towards the magnetic impeller **170** through the at least one inlet aperture **185** and the fluid to be propelled out of the jet assembly **180** through the at least one outlet aperture **186**.

Further, the method above may further include:

wherein the outer bearing member **120** is manufactured of a plastic material or engineered plastics, wherein the inner bearing member **130** is manufactured of rubber or a rubber-like material, wherein the shaft member **150** is manufactured of steel or a metal material, and wherein the shaft protection member **160** is manufactured of a hard material.

Furthermore, the method above may further include any of the parts, steps and/or details that have been described in the above paragraphs with regard to the improved bearing and shaft assembly **100**, jet assemblies **180**, and pumps **300**, such as magnetic coupling-type pumps **300** and the like.

It is to be understood that the present invention is not limited to the embodiments described above or as shown in the attached figures, but encompasses any and all embodiments within the spirit of the invention.

What is claimed is:

1. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:

a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,

wherein said bearing assembly comprises an outer bearing member and an inner bearing member,

wherein said outer bearing member is dimensioned and configured such that a first end of said outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use,

wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and

wherein said inner bearing member is dimensioned and configured such that said inner bearing member is rotated around a shaft member,

wherein said shaft assembly comprises said shaft member and said shaft protection member,

wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,

wherein said shaft member extends through an inner surface of said jet assembly housing,

wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet

10

assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,

wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said base of said jet assembly housing comprises an inner surface and an outer surface,

wherein said front cover comprises an inner surface and an outer surface,

wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another, and

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.

2. The combination jet assembly and mounting housing member apparatus according to claim **1**,

wherein said outer bearing member further comprises a base at said first end of said outer bearing member, wherein a base of said outer bearing member comprises a cavity, and wherein said body of said outer bearing member extends upwardly from said base of said outer bearing member,

wherein said shaft member comprises a base, a first end, a second end, and a body extending from said first end to said second end of said shaft member, and wherein said body of said shaft member extends upwardly from said base of said shaft member,

wherein said shaft protection member further comprises a body comprising a first end, a second end, and a cavity extending from said first end to said second end of said body of said shaft protection member, wherein said body of said shaft protection member extends upwardly from said base of said shaft protection member, wherein said cavity of said body of said shaft protection member is dimensioned and configured for receiving said body of said shaft member, and wherein said body of said shaft protection member is dimensioned and configured for fitting within said cavity of said inner bearing member, said cavity of said outer bearing member, and said cavity of said magnetic impeller, and wherein, when in operational use, said body of said outer bearing member, a body of said inner bearing member, said body of said shaft protection member, and said body of said shaft member are all positioned within said cavity of said magnetic impeller.

3. The combination jet assembly and mounting housing member apparatus according to claim **1**, wherein said hard material of said shaft protection member is ceramic.

4. The combination jet assembly and mounting housing member apparatus according to claim **1**, wherein said top surface of said base of said shaft protection member is polished.

5. The combination jet assembly and mounting housing member apparatus according to claim **1**, wherein said shaft

US 10,215,178 B2

11

assembly and said bearing assembly align an axis of rotation of said magnetic impeller with an axis of rotation of a driving magnetic plate mounted to a motor, and wherein said shaft assembly is secured to said base of said jet assembly housing and said bearing assembly is secured to a center of said magnetic impeller within said jet assembly housing.

6. The combination jet assembly and mounting housing member apparatus according to claim 2, wherein said first end of said outer bearing member and said first end of said inner bearing member are substantially flush with a rear side of said magnetic impeller when said outer bearing member and said inner bearing member are positioned within said cavity of said magnetic impeller.

7. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein, when in operational use, said shaft assembly is stationary.

8. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft member is manufactured of steel or a metal material.

9. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:

a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,

wherein said bearing assembly comprises at least one bearing member,

wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,

wherein said shaft assembly comprises said shaft member and said shaft protection member,

wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,

wherein said shaft member extends through an inner surface of said jet assembly housing,

wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,

wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said base of said jet assembly housing comprises an inner surface and an outer surface,

wherein said front cover comprises an inner surface and an outer surface,

wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another, and

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and

12

a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.

10. The combination jet assembly and mounting housing member apparatus according to claim 9,

wherein said at least one bearing member further comprises a base at said first end of said at least one bearing member, wherein said base of said at least one bearing member comprises a cavity, and wherein a body of said at least one bearing member extends upwardly from said base of said at least one bearing member,

wherein said shaft member comprises a base, a first end, a second end, and a body extending from said first end to said second end of said shaft member, and wherein said body of said shaft member extends upwardly from said base of said shaft member,

wherein said shaft protection member further comprises a body that comprises a first end, a second end, and a cavity extending from said first end to said second end of said body of said shaft protection member, wherein said body of said shaft protection member extends upwardly from said base of said shaft protection member, wherein said cavity of said body of said shaft protection member is dimensioned and configured for receiving said body of said shaft member, and wherein said body of said shaft protection member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and said cavity of said magnetic impeller, and

wherein, when in operational use, said at least one bearing member, said body of said shaft protection member, and said body of said shaft member are all positioned within said cavity of said magnetic impeller.

11. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.

12. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said top surface of said base of said shaft protection member is polished.

13. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said shaft member is manufactured of steel or a metal material.

14. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said hard material is ceramic.

15. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said mounting housing member further comprises at least one mounting leg.

16. The combination jet assembly and mounting housing member apparatus according to claim 15, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.

17. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein, when in operational use, said shaft assembly is stationary.

18. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and

US 10,215,178 B2

13

pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:

a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,

wherein said bearing assembly comprises at least one bearing member,

wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,

wherein said shaft assembly comprises said shaft member and said shaft protection member,

wherein said shaft protection member comprises a base and a body extending upwardly from said base of said shaft protection member,

wherein said base of said shaft protection member comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,

wherein said shaft member extends through an inner surface of said jet assembly housing,

wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,

wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,

wherein said base of said jet assembly housing comprises an inner surface and an outer surface,

wherein said front cover comprises an inner surface and an outer surface,

wherein said impeller-receiving chamber is defined by said base of said jet assembly housing and said front cover of said jet assembly housing when said base of said jet assembly housing and said front cover of said jet assembly housing are secured to one another, and

wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,

wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.

19. The combination jet assembly and mounting housing member apparatus according to claim 18, wherein said base diameter of said base of said shaft protection member is at least one and a half time greater than said shaft member diameter.

20. The combination jet assembly and mounting housing member apparatus according to claim 18,

wherein said at least one bearing member is comprised of an outer bearing member and an inner bearing member,

14

wherein said outer bearing member comprises a first end, a second end, and a body that comprises a first end, a second end, and a cavity extending from said first end of said body of said outer bearing member to said second end of said body of said outer bearing member, wherein said cavity of said body of said outer bearing member is dimensioned and configured for receiving said inner bearing member, and wherein said outer bearing member is dimensioned and configured for fitting within said cavity of said magnetic impeller,

wherein said inner bearing member comprises a body comprising a first end, a second end, and a cavity extending from said first end of said body of said inner bearing member to said second end of said body of said inner bearing member, wherein said inner bearing member is dimensioned and configured for fitting within said cavity of said body of said outer bearing member and within said cavity of said magnetic impeller, and

wherein said outer bearing member and said inner bearing member, when in operational use, are positioned adjacent to one another and are aligned axially with one another.

21. The combination jet assembly and mounting housing member apparatus according to claim 18, wherein at least one member of said at least one bearing member is manufactured of a plastic material.

22. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.

23. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein an inner surface of an innermost member of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use and is generally smooth for a substantial portion of said inner surface of said innermost member.

24. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said shaft protection member further comprises a body extending upwardly from said base of said shaft protection member, wherein said body of said shaft protection member comprises a first end, a second end, and a cavity extending from said first end to said second end of said body of said shaft protection member, wherein said cavity of said body of said shaft protection member is dimensioned and configured for receiving said body of said shaft member, and wherein said body of said shaft protection member is dimensioned and configured for fitting within said cavity of said at least one bearing member.

25. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said top surface of said base of said shaft protection member makes contact with said first end of said at least one bearing member during operational use.

26. The combination jet assembly and mounting housing member apparatus according to claim 18, wherein an inner surface of an innermost member of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use and is generally smooth for a substantial portion of said inner surface of said innermost member.

27. The combination jet assembly and mounting housing member apparatus according to claim 18, wherein said top surface of said base of said shaft protection member makes

US 10,215,178 B2

15

contact with said first end of said at least one bearing member during operational use.

28. The combination jet assembly and mounting housing member apparatus according to claim **18**, wherein said base of said shaft protection member is manufactured of ceramic. 5

29. The combination jet assembly and mounting housing member apparatus according to claim **18**, wherein the magnetic impeller comprises an outer surface and at least one vane, and wherein the at least one vane is positioned on the outer surface of the magnetic impeller. 10

30. The combination jet assembly and mounting housing member apparatus according to claim **18**, wherein said shaft member is manufactured of steel or a metal material.

* * * * *

16

LURACO’S FIRST AMENDED INFRINGEMENT CONTENTIONS RE:
US10215178

1. Defendant/Counter Plaintiff Luraco Health & Beauty, LLC (“Luraco”), hereby provide its first amended infringement contentions against Plaintiffs/Counter Defendants Lexor Inc., Lexor Manufacturing LLC (“Lexor Mfg.”), and Ecojet Inc. (“Ecojet”). .
2. Luraco alleges that Lexor, Inc, and Lexor Mfg sell products made by Lexor Mfg. and Ecojet.
3. The EcoJet II Magnetic Drive (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Whirlpool Magnetic Jet System (aka the “Ecojet Universal 3.5 Shafted (with motor and mounting housing)”), Universal Magnetic Wet-End (aka the “Ecojet Universal 3.5 Shafted”), Ecojet MD 3.0 Shafted, and Ecojet MD 3.0 Shafted (with motor and mounting housing) are manufactured and sold by Lexor Manufacturing, LLC, which also is believed to licenses use of its patents to Ecojet.
4. Faithful snapshots of the infringing products are shown below:

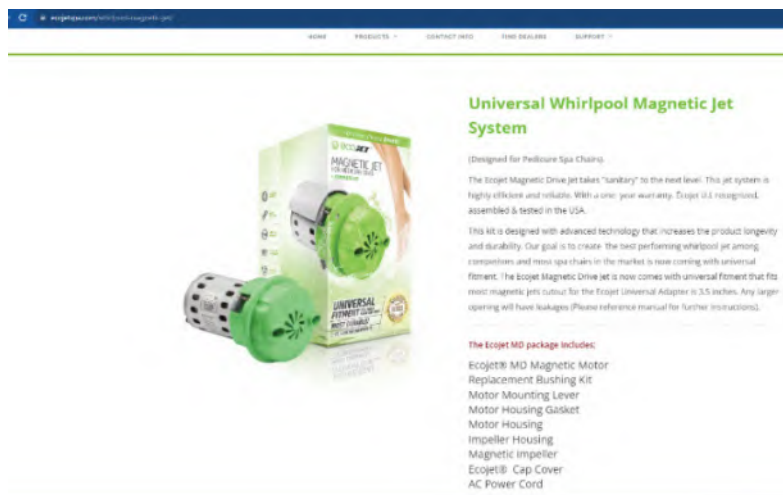


Image from Exhibit 15 of Second Amended Answer

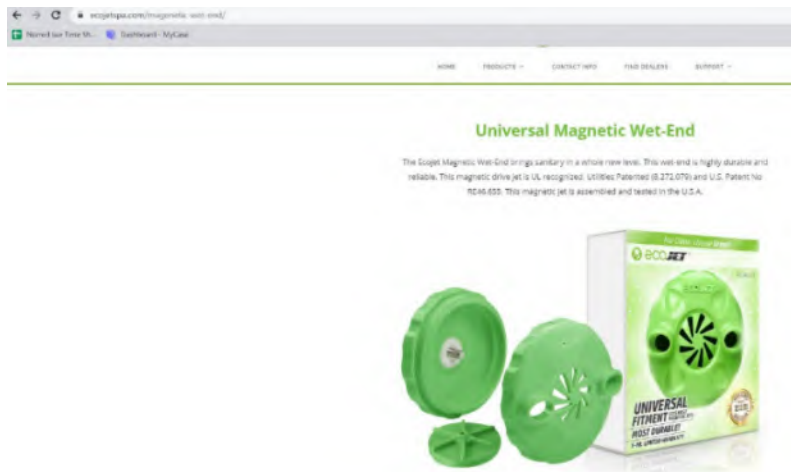


Image From Exhibit 15 of Second Amended Answer



ECOJET MD MAGNETIC JET INSTALLATION GUIDE

WARNING: PLEASE READ AND FOLLOW SAFETY INSTRUCTIONS BEFORE USING THE EQUIPMENT. ALWAYS UNPLUG THE EQUIPMENT BEFORE SERVICING TO REDUCE THE RISK OF ELECTRIC SHOCK AND/OR PERSONAL INJURY.

NOTE: Ecojet MD magnetic motor & components are assembled in alignment as illustrated below. Please follow step-by-step instructions. (Rev. 1.2)

Ecojet MD package contents:

- 1 Ecojet MD Magnetic Motor (Part#: EMD-1001)
- 2 Motor Cap Lock-Nut (Part#: EMD-2108)
- 3 Universal Adapter (1pc.) (Part#: EMD-2107)
- 4 Motor Housing Gasket (Part#: EMD-2106)
- 5 Motor Housing (Part#: EMD-2105)
- 6 Impeller Housing (Part#: EMD-2104)
- 7 Magnetic Impeller (Part#: EMD-2103)
- 8 Ecojet Cap Cover (Part#: EMD-2101)
- 9 AC Power Cord (Part#: EMD-2109)



Image from Exhibit 11 of Second Amended Answer

1. The charts showing infringement of US 10,215,178 are attached as Exhibit 8a. Luraco may supplement or amend this set of contentions based on further analysis.

US 10,215,178 Claim Language	Evidence of Infringement of Ecojet MD 3.0 (Shafted)
<p>1. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lexor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,</p>	<p>As shown in Fig. 8(1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing.</p>
<p>b) wherein said bearing assembly comprises an outer bearing member and an inner bearing member,</p>	<p>As shown in Fig. 13(5-7) the bearing assembly comprises an outer bearing member and a inner bearing member.</p>
<p>c) wherein said outer bearing member is dimensioned and configured such that a first end of said outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use,</p>	<p>As shown in Fig. 8(6), 12 (3-6), and 13(1-3, 5-6, and 10) the outer bearing member has a diameter and is dimensioned and configured such that a first end of the outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use.</p>
<p>d) wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and</p>	<p>As shown in Fig. 13(7) the inner bearing member is manufactured of a rubber that is able to absorb vibration during operational use.</p>
<p>e) wherein said inner bearing member is dimensioned and configured such that said inner bearing member is rotated around a shaft member,</p>	<p>As shown in Fig. 12(3 and 6) and 13(3 and 7) the inner bearing member is dimensioned and configured such that the inner bearing member is rotated around a shaft member.</p>
<p>f) wherein said shaft assembly comprises said shaft member and said shaft protection member,</p>	<p>As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises the shaft member and the shaft protection member.</p>

<p>g) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,</p>	<p>As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member comprises base that comprises a top surface, a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing, and wherein the shaft protection member is manufactured of a ceramic.</p>
<p>h) wherein said shaft member extends through an inner surface of said jet assembly housing,</p>	<p>As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the jet assembly housing.</p>
<p>i) wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,</p>	<p>As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the magnetic impeller is positioned within the chamber of the housing and configured to rotate within the chamber of the housing where the rotation of the magnetic impeller causes the fluid to flow through the inlet aperture and enter into the chamber of the housing to flow through the outlet aperture and exit from the chamber of the housing</p>
<p>j) wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,</p>	<p>As shown in Fig. 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.</p>
<p>k) wherein said base of said jet assembly housing comprises an inner surface and an outer surface,</p>	<p>As shown Fig. 8(7 and 10) and 11(6) the base of said jet assembly housing comprises an inner surface and an outer surface.</p>
<p>l) wherein said front cover comprises an inner surface and an outer surface,</p>	<p>Again, referring to Fig. 8(3 and 9) and 11(7) the front cover comprises an inner surface and an outer surface.</p>

m) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another, and	As shown in Fig. 15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
n) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
o) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,	As shown in Fig. 5(2-4) and 7(4) the mounting housing member comprises a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries.
p) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
3. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said hard material of said shaft protection member is ceramic.	As shown in Fig. 12(4) and 13(2) the shaft protection member is believed to be ceramic or ceramic-type material.
4. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said top surface of said base of said shaft protection member is polished.	As shown in Fig. 12(4) and 13(2) the top surface of said base of said shaft protection member is polished.
5. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft assembly and said bearing assembly align an axis of rotation of said magnetic impeller with an axis of rotation of a driving magnetic plate mounted to a motor, and wherein said shaft assembly is secured to said base of said jet assembly housing and said bearing assembly is secured to a center of said magnetic impeller within said jet assembly housing.	As shown in Fig. 6(1), 7(3), 8(1 and 7), 9(1-3), 12(1-3 and 5-6), and 13(1 and 4-5) the shaft assembly and bearing assembly align an axis of rotation of the magnetic impeller with an axis of rotation of the magnetic plate mounted on the motor, and the shaft assembly is secured to the base of the jet assembly housing and the bearing assembly is secured to the center of the magnetic impeller within the jet assembly housing.

<p>6. The combination jet assembly and mounting housing member apparatus according to claim 2, wherein said first end of said outer bearing member and said first end of said inner bearing member are substantially flush with a rear side of said magnetic impeller when said outer bearing member and said inner bearing member are positioned within said cavity of said magnetic impeller.</p>	<p>As shown in Fig. 13(4 and 9-10) and 14(2 and 8) the first end of the inner bearing member is substantially flush with the rear side of the magnetic impeller when the outer bearing member and the inner bearing member are positioned within the cavity of the magnetic impeller.</p>
<p>7. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein, when in operational use, said shaft assembly is stationary.</p>	<p>As shown in Fig. 12(2- 3) and 13(1 and 3) the shaft assembly is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operation.</p>
<p>8. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft member is manufactured of steel or a metal material.</p>	<p>As shown in Fig. 12(3) and 13(3) the shaft member is of steel or a metal material.</p>
<p>9. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:</p>	<p>The Ecojet MD 3.0 Jet Set and Impeller was previously for sale on the Lxor website. It is currently described on the Pro Spa Depot Website at https://prospadepot.com/ecojet-front-housing-set.html. See Fig 4. Additionally it is for sale at SpaSalon.us at https://www.spasaloon.us/spa-parts/ecojet-magnetic-drive-jet.html. See Fig 4.</p>
<p>a) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,</p>	<p>As shown in Fig. 8(1 and 6) and 12(1-2 and 5) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing.</p>
<p>b) wherein said bearing assembly comprises at least one bearing member,</p>	<p>As shown in Fig. 12(5), 13(5-7), and 14(8) the bearing assembly comprises at least one bearing member.</p>

<p>c) wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,</p>	<p>As shown in Fig. 8(6), 12(1-6), and 13(1-10) the inner bearing is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use.</p>
<p>d) wherein said shaft assembly comprises said shaft member and said shaft protection member,</p>	<p>As shown in Fig. 12(2-4) and 13(1-3) the shaft assembly comprises the shaft member and the shaft protection member.</p>
<p>e) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,</p>	<p>As shown in Fig. 8(6-7) and 12(1 and 3-6) the shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing, and the shaft protection member is manufactured of a ceramic (or ceramic-like) material.</p>
<p>f) wherein said shaft member extends through an inner surface of said jet assembly housing,</p>	<p>As shown in Fig. 10(5), 11(5), and 12(3) the shaft member extends through the inner surface of the base of jet assembly housing.</p>
<p>g) wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,</p>	<p>As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use.</p>
<p>h) wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,</p>	<p>As shown in Fig. . 8(1, 3-5, and 7-10), 11(1-3 and 6-7), 15(1, 6, and 10), and 16(3 and 5-6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture.</p>
<p>i) wherein said base of said jet assembly housing comprises an inner surface and an outer surface,</p>	<p>As shown in Fig. 8(7 and 10) and 11(6) the base of the jet assembly housing comprises an inner surface and an outer surface.</p>

j) wherein said front cover comprises an inner surface and an outer surface,	As shown in Fig. 8(3 and 9) and 11(7) the front cover comprises an inner surface and an outer surface.
k) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another, and	As shown in Fig.15(1-3) and 16(1-3) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
l) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and	As shown in Fig. 8(6 and 8), 15(1 and 7), and 16(3-4) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
m) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,	As indicated Fig. 5(2-4) and 7(4) the mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries.
n) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.	As shown in Fig. 5(1-2) and 6(1 and 3) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
11. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 13(6) the outer bearing member is manufactured of a plastic material.

12. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said top surface of said base of said shaft protection member is polished.	As shown in Fig. 12(4) and 13(2) the base of the shaft protection member is polished.
13. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 12(3) and 13(3) the shaft member is manufactured of steel.
14. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said hard material is ceramic.	As shown in Fig. 12(4) and 13(2) the base of the shaft protection member is manufactured of a ceramic.
17. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein, when in operational use, said shaft assembly is stationary.	As shown in Fig. 12(2-3) and 13(1 and 3) the shaft assembly is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operation.
22. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.	As shown in Fig. 8(6), 12(1 and 3-6), and 13(2-6 and 10) the base of the shaft protection member makes contact with the first end of the outer bearing member during operational use.
23. The combination jet assembly and mounting	

<p>housing member apparatus according to claim 9, wherein an inner surface of an innermost member of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use and is generally smooth for a substantial portion of said inner surface of said innermost member.</p>	<p>As shown in Fig. 13(7) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use and is generally smooth for a substantial portion of inner surface.</p>
<p>25. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said top surface of said base of said shaft protection member makes contact with said first end of said at least one bearing member during operational use.</p>	<p>As shown in Fig. 8(6), 12(3-6), and 13(2-6 and 10), the base of the shaft protection member makes contact with the first end of the outer bearing member during operational use.</p>

Figures for the Ecojet MD 3.0 **(Shafted Model)**

ECO magnetic drive jet

Option - complete set (wet cover + dry motor)



FREE
SHIPPING
continental US only

<https://ecojetspa.com/product/ecojet-md-magnetic-jet-set/>



HOME

PRODUCTS ▾

CONTACT INFO

FIND DEALERS

SUPPORT ▾



Ecojet Magnetic Drive Jet Set (Retail)


\$199.00

Ecojet Magnetic Whirlpool Motor (Design for Pedicure Spa Chair).

The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized, Utilities Patented (8,272,079) and U.S. Patent No RE46,655. This magnetic jet is assembled and tested in the U.S.A.

This kit is design to fit most spa chairs in the market. The Ecojet Magnetic Drive Jet will fit the standard 3 inch diameter cut out

Figure 3




PSDTM
Pedicure Spa & Salon Furniture Wholesaler

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US F


HOME / ECOJET FRONT HOUSING SET

Product Code: Ecojet Front Housing Set

ECOJET FRONT HOUSING SET



[Add to Wishlist](#) [Add to Compare](#)



DETAILS

Ecojet Replacement Magnetic Impeller Housing Set (3pcs. Kit).

The Ecojet Magnetic Impeller Housing set is a direct housing and impeller replacement for the Ecojet Magnetic Drive Jet Set. The set comes with cap cover, magnetic impeller, and the impeller housing.

Ecojet Impeller Housing contents:

Ecojet MD Cap Cover
Ecojet MD Magnetic Impeller
Ecojet MD Impeller Housing

RELATED PRODUCTS

Description	Email	Reviews ⁷	Shipping & Warranty	Downloads	How to	Video gallery
-------------	-------	----------------------	---------------------	-----------	--------	---------------

ECO magnetic jet - old

Ecojet Impeller Housing contents:

- Ecojet MD Cap Cover
- Ecojet MD Magnetic Impeller
- Ecojet MD Impeller Housing

Ecojet Replacement Magnetic Whirlpool Motor.

- The Ecojet Replacement Magnetic Whirlpool Motor comes with a two-year warranty .We assemble and test the motor in the U.S.A
- This motor has an internal cooling system to prevent overheating. This is a direct motor replacement for the Ecojet Magnetic Drive Jet Set.

The Ecojet MD package contains:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter (2pcs.)
- Motor Housing Gasket
- Motor Housing (3.5 inches)
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card (2pcs.)

2. Mounting Housing (configured to mount to wall of pedicure basin)

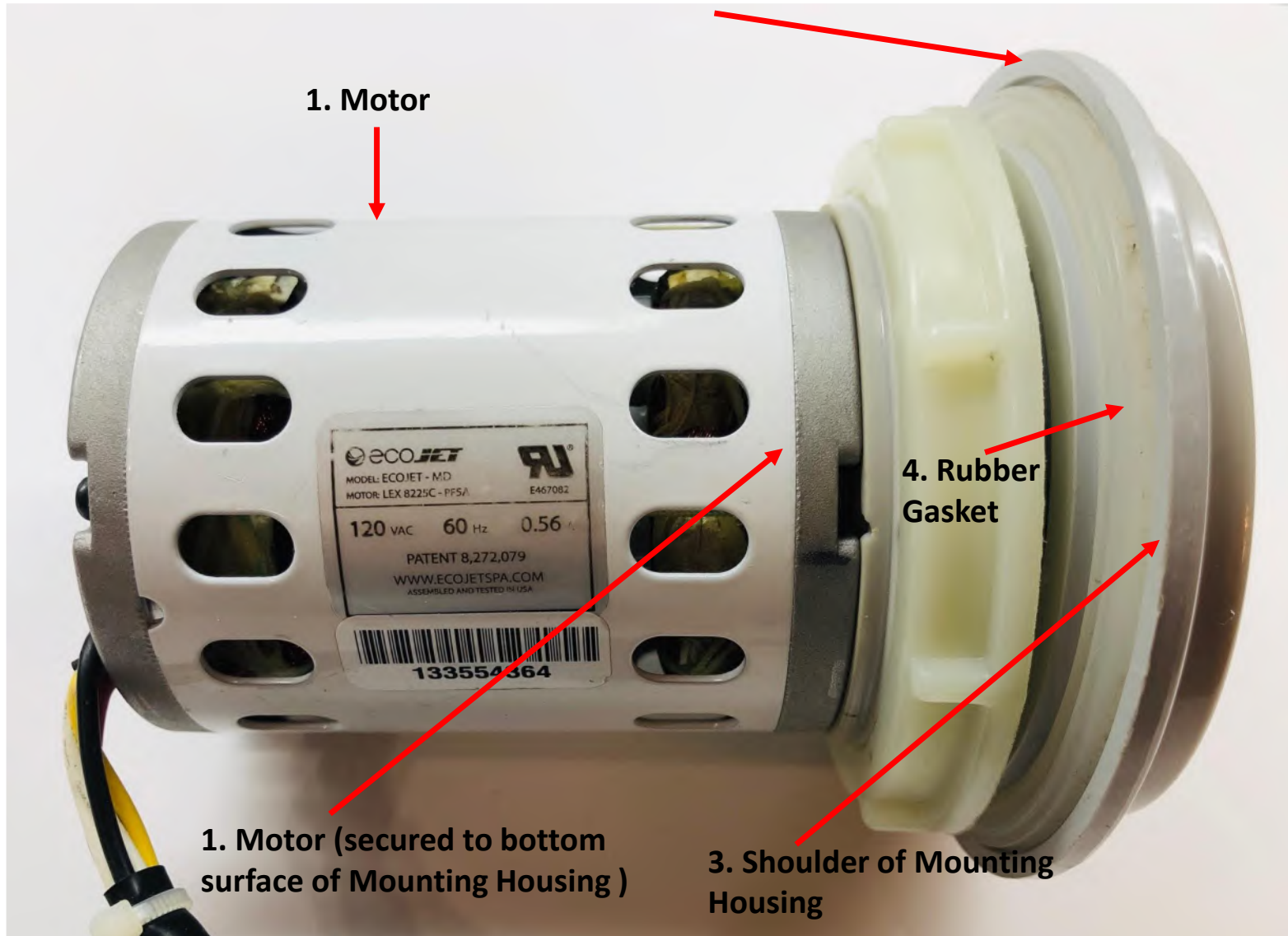
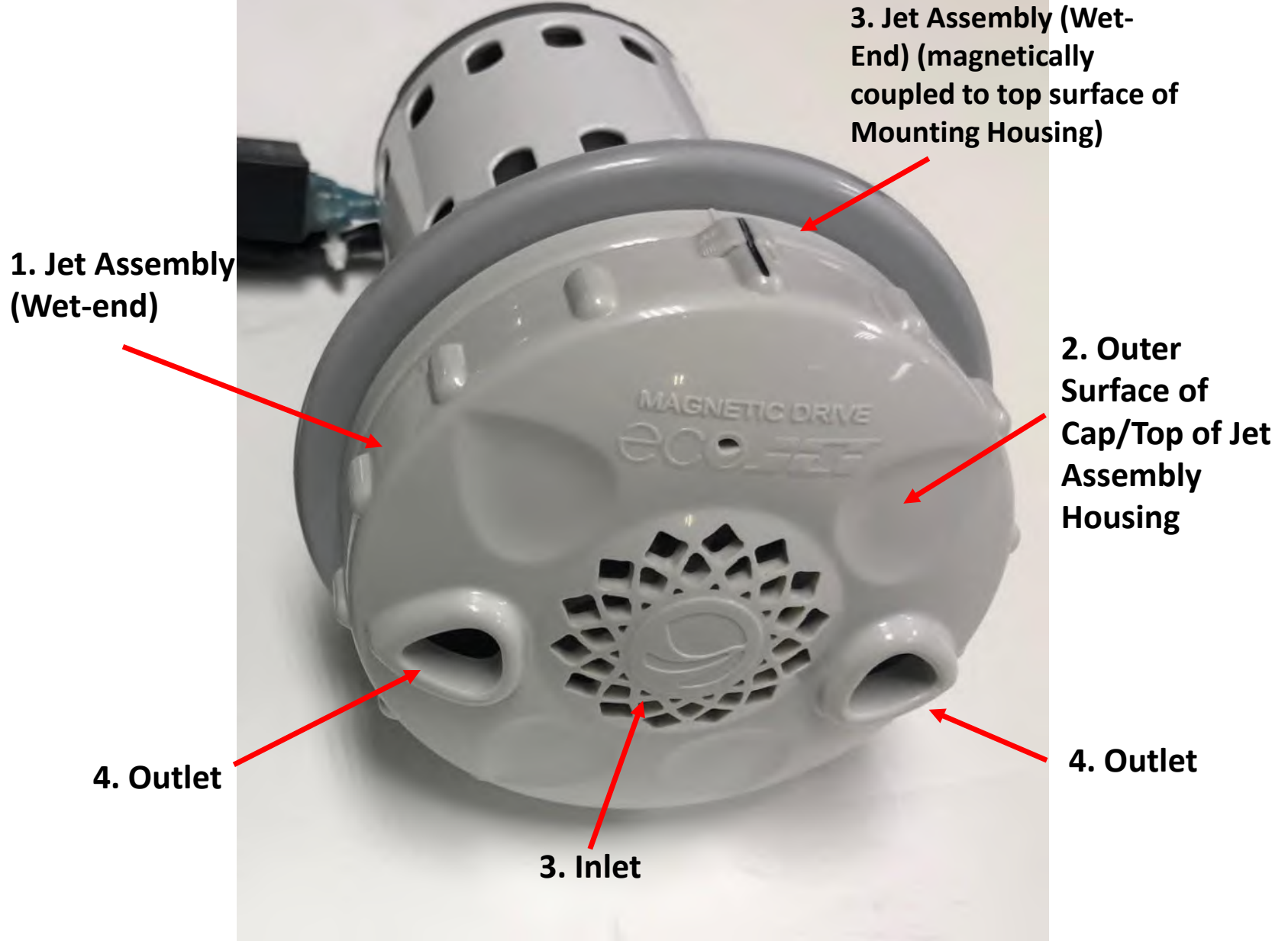


Figure 6



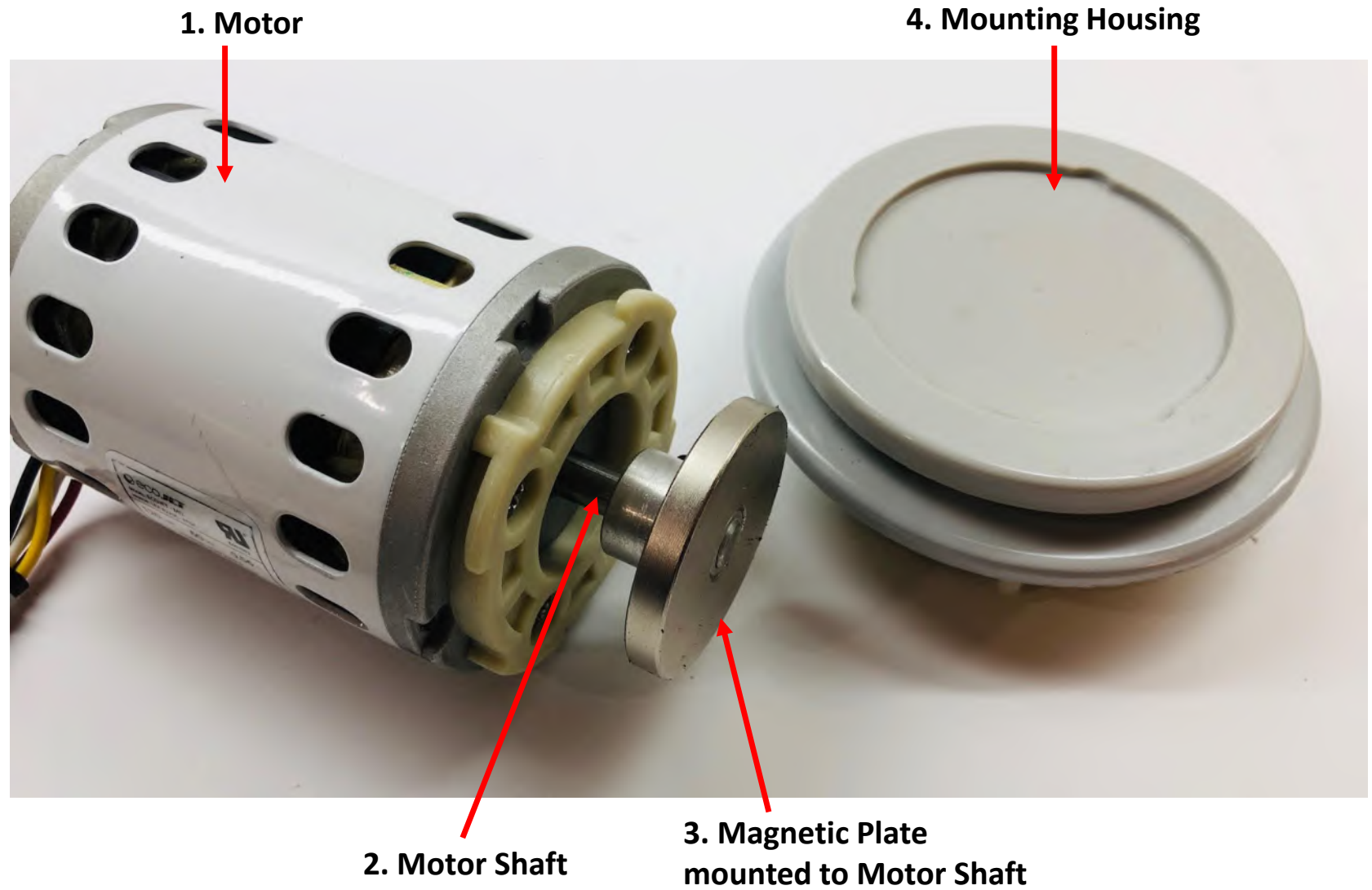
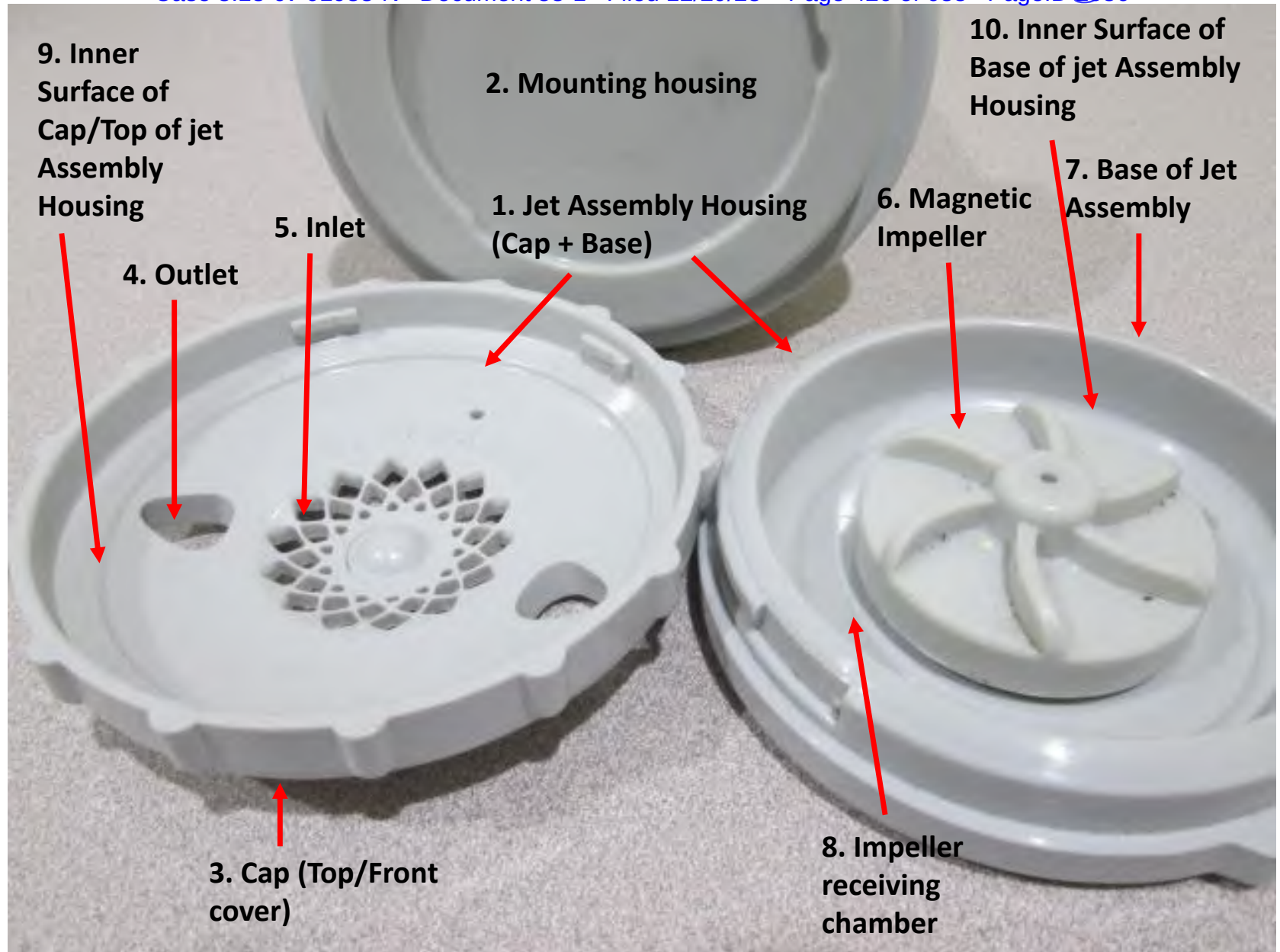


Figure 8



ECO magnetic drive jet

Option - complete set (Wet cover + dry motor)

3. Magnetic Plate (Attached to motor shaft contained Inside of mounting housing)

1. Magnetic Impeller



2. Mounting Housing
front view

This image shows that the Magnetic Plate and Magnetic Impeller rotate on the same axis



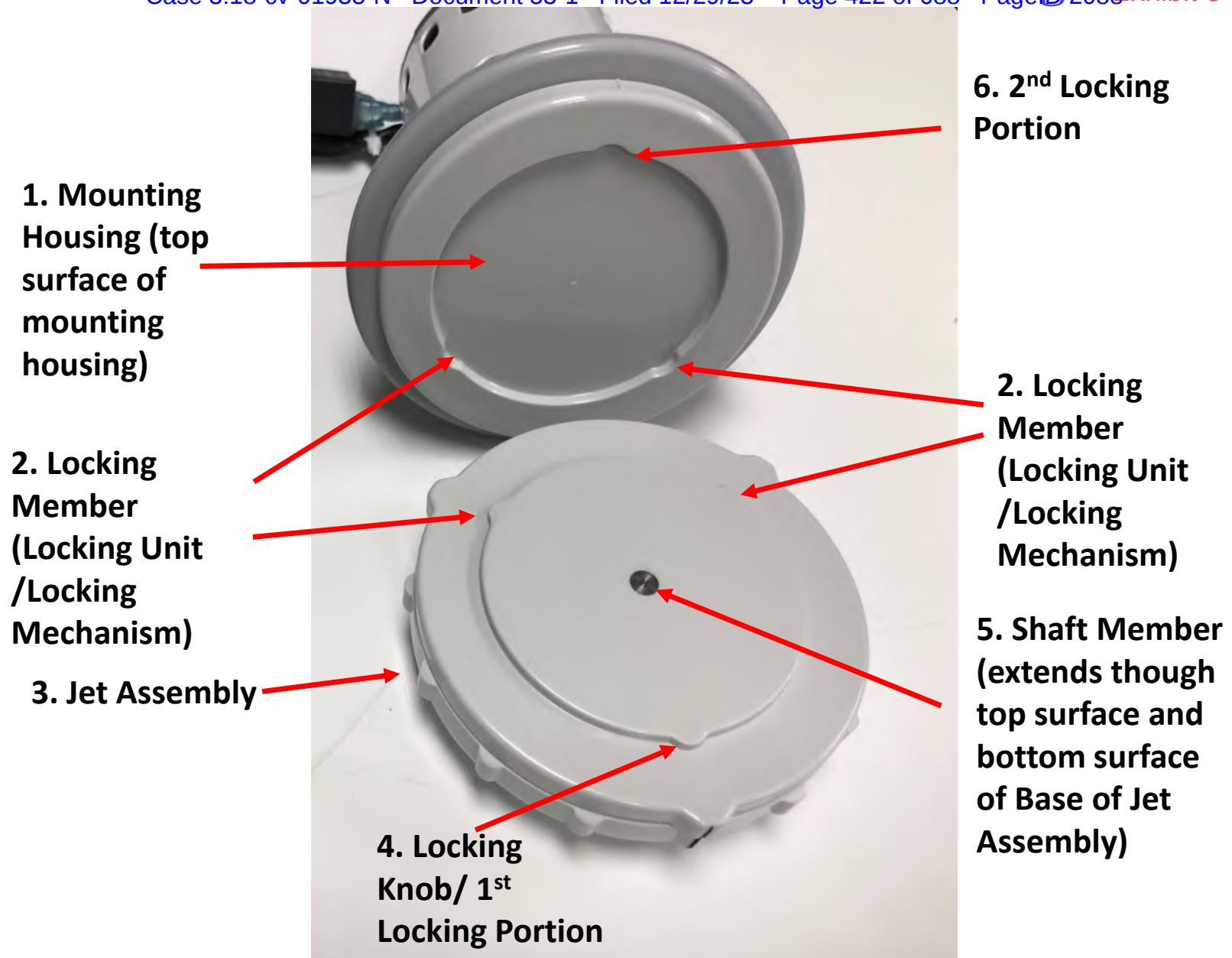
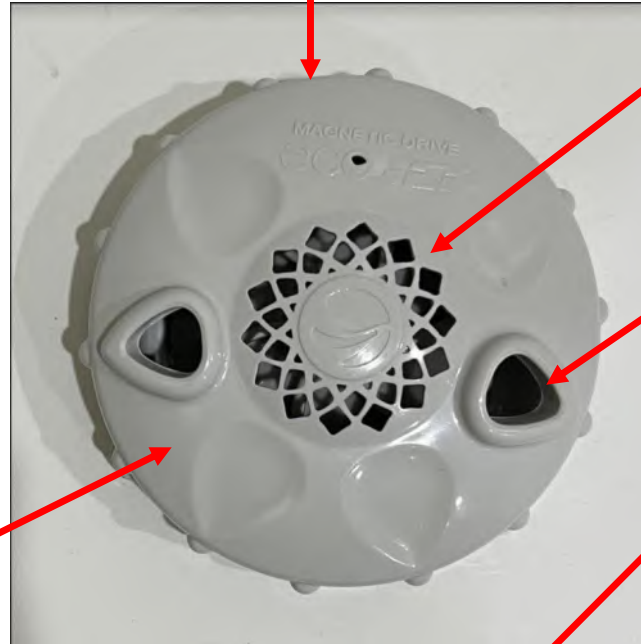


Figure 11

1. Jet Assembly

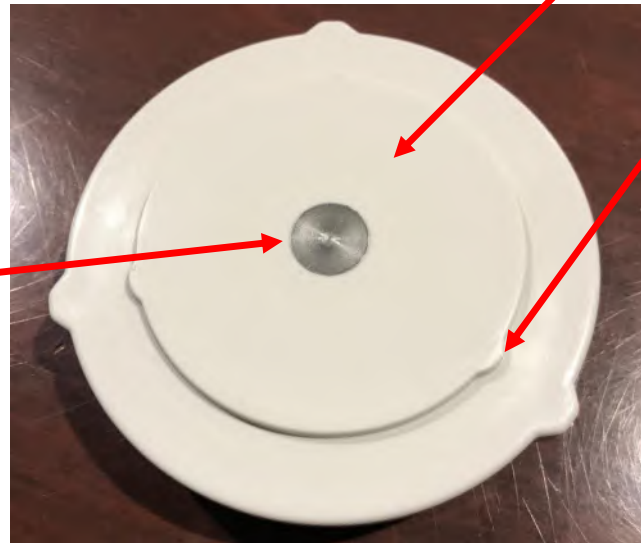


2. Inlet

3. Outlet

**7. Outer Surface
of Cap/Top of jet
Assembly
Housing**

**6. Outer Surface of
Base/Bottom of Jet
Assembly Housing**



**4. Locking Knob
(locking mechanism)**

**5. Shaft Member
(extends though
top surface and
bottom surface
of Base of Jet
Assembly)**

Figure 12

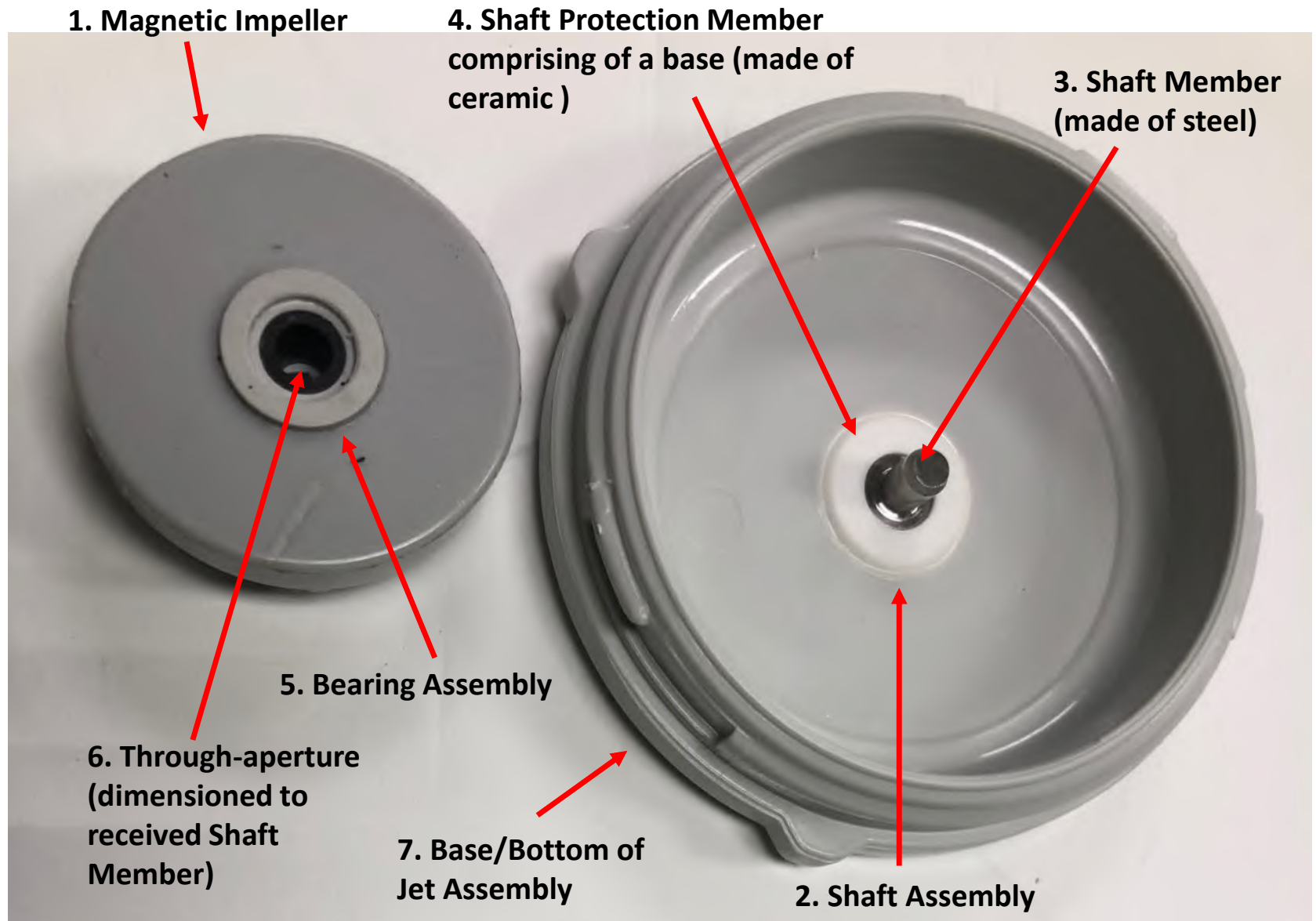


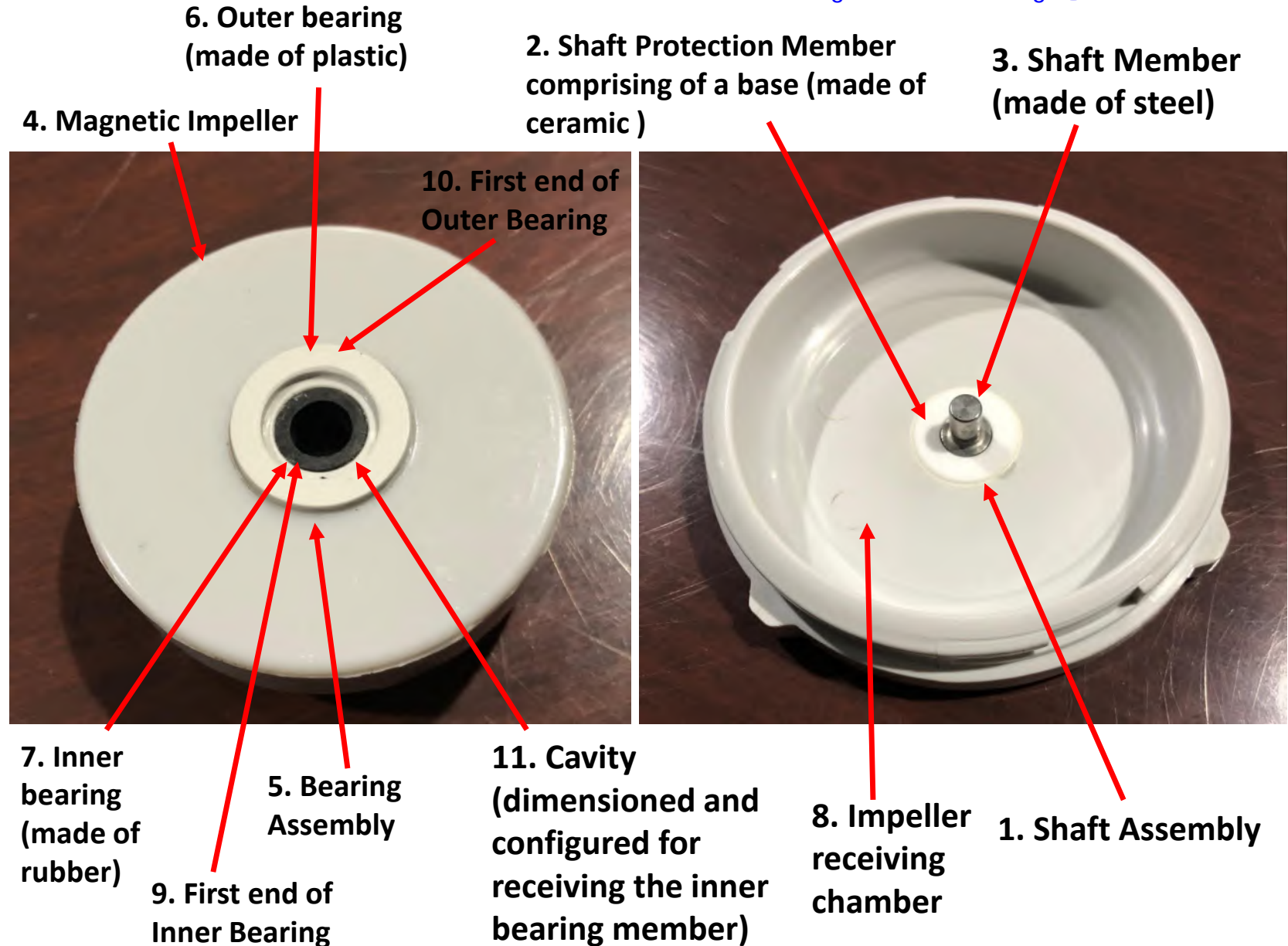
Figure 13

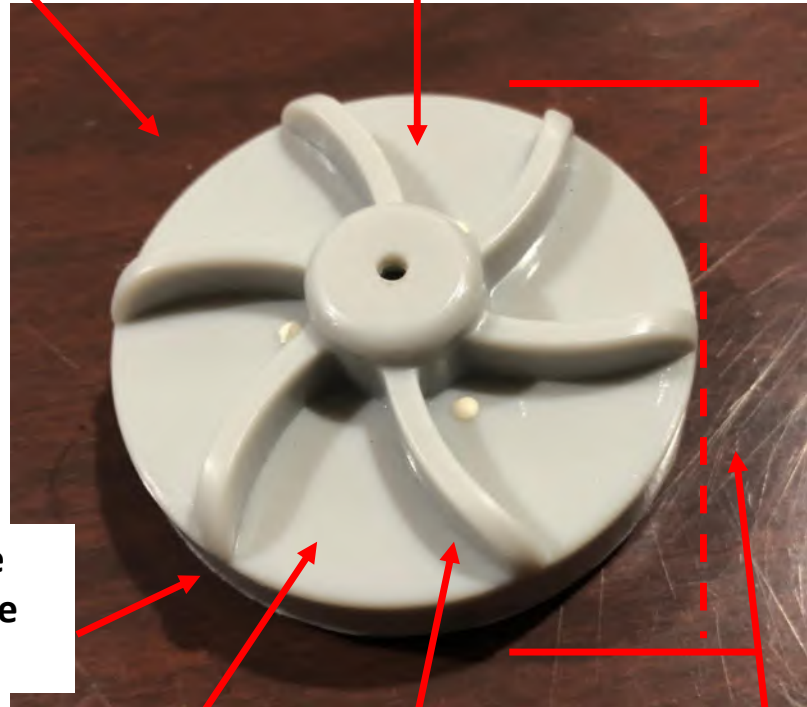
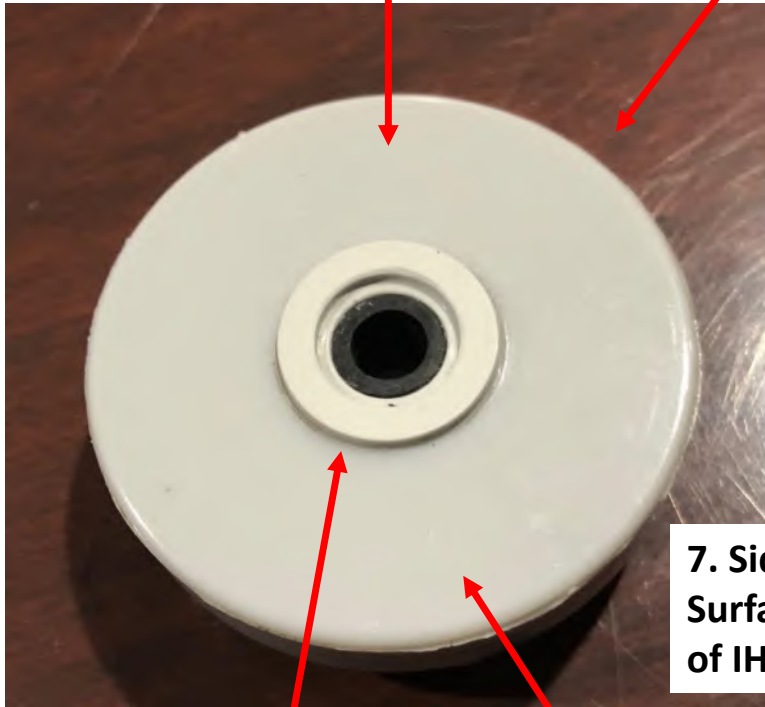
Figure 14

Magnetic Impeller

2. Bottom/Lower Surface of IH

3. Impeller housing ("IH")

4. Top/Upper Surface of IH



7. Side Surface of IH

8. Bearing Assembly

5. Magnetic plate/disk is fully enclosed within Impeller Housing

1. Arm Member

6. Outer Diameter

Figure 15

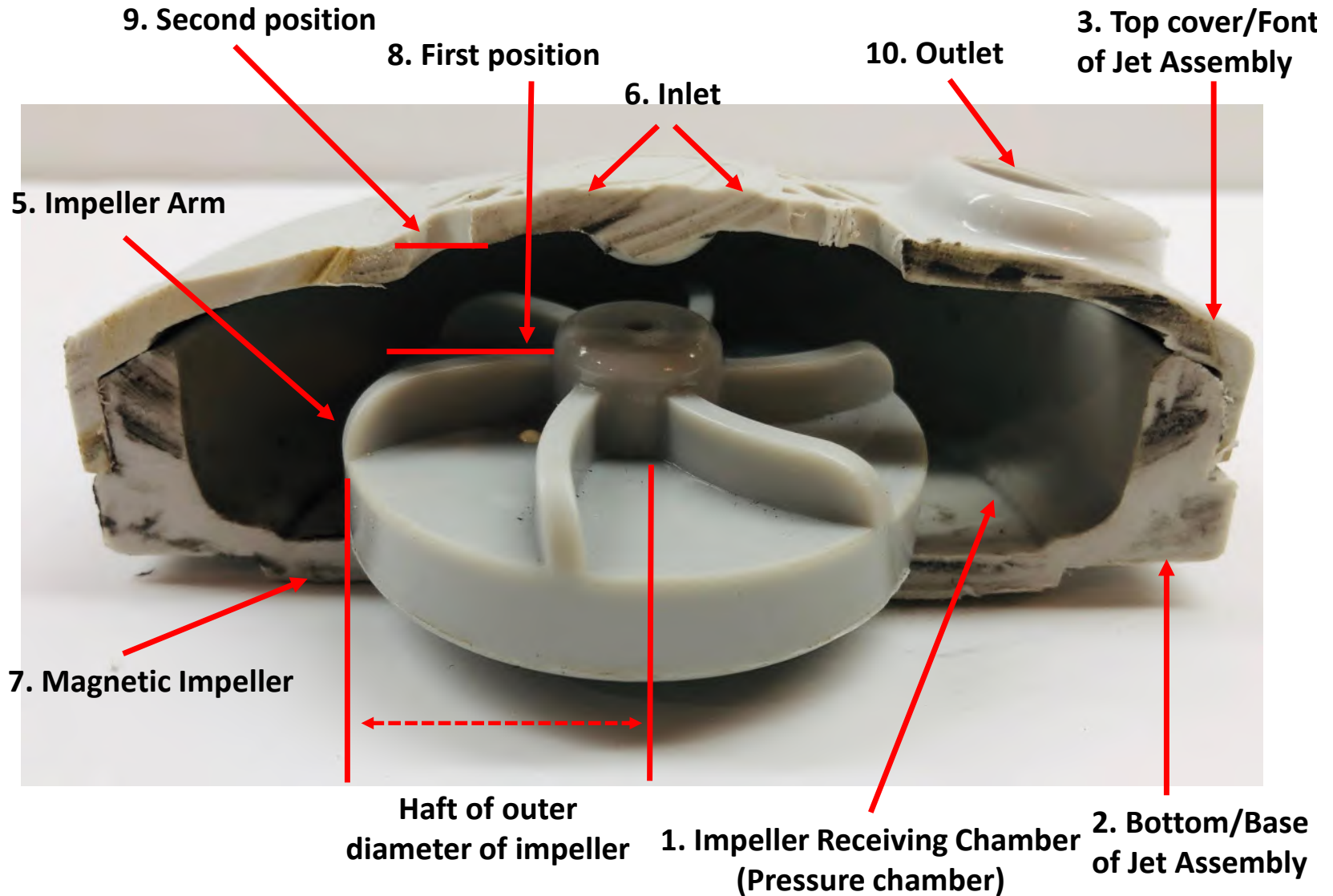
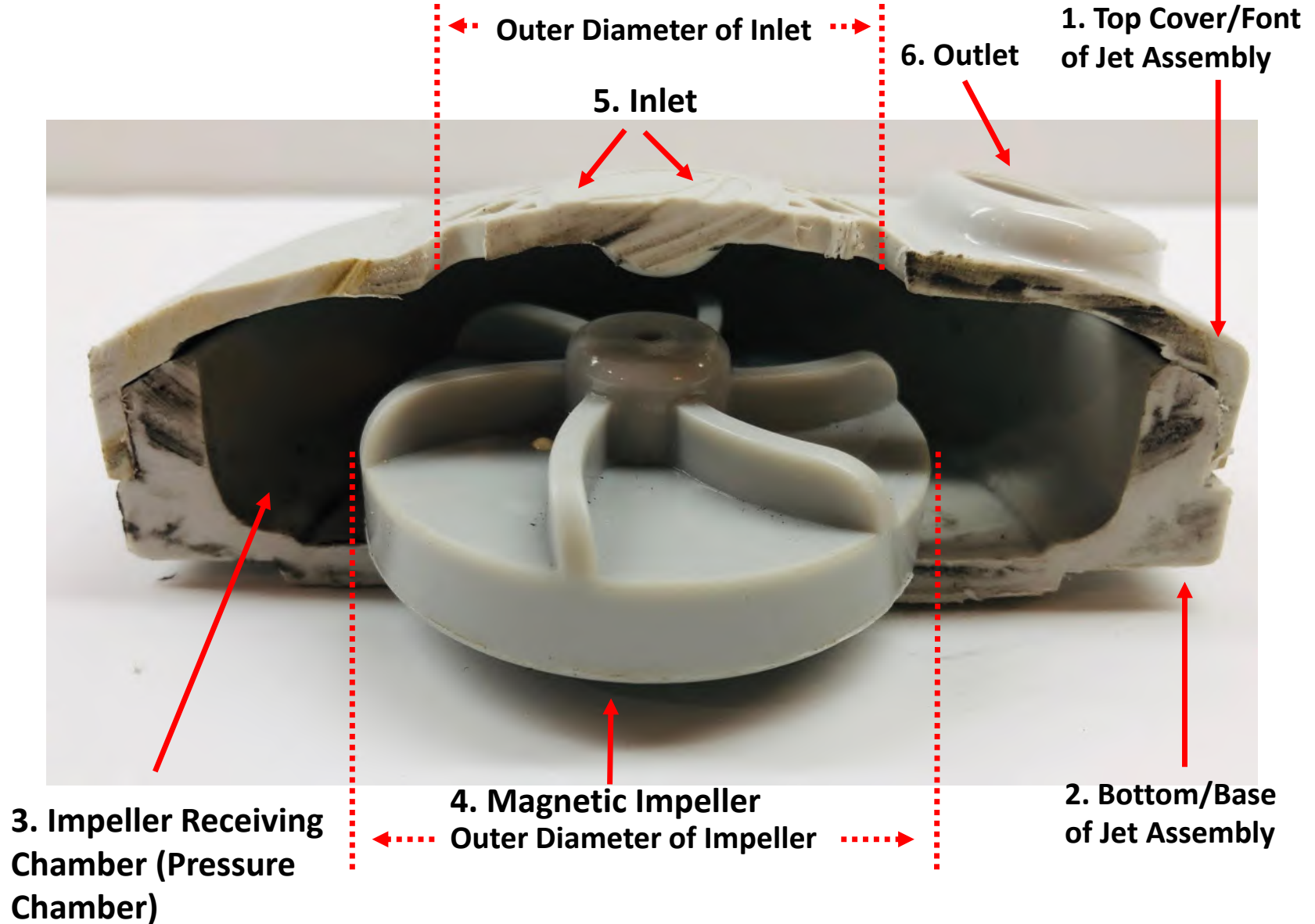




Figure 16

← → ↻ 📄 lexor.com/products/disposable-liners-200ct?variant=42120649212070

age Starts At **\$2495** **FREE SHIPPING** For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key


 **Lexor®** [PEDICURE CHAIRS](#) [PROMOTIONS](#) [SPECIAL FEATURES](#) [SALON FURNITURE](#) [PARTS & ACCESSORIES](#) [SHOWROOMS](#)



Disposable Liners (200ct)

EcoJet

\$25.00

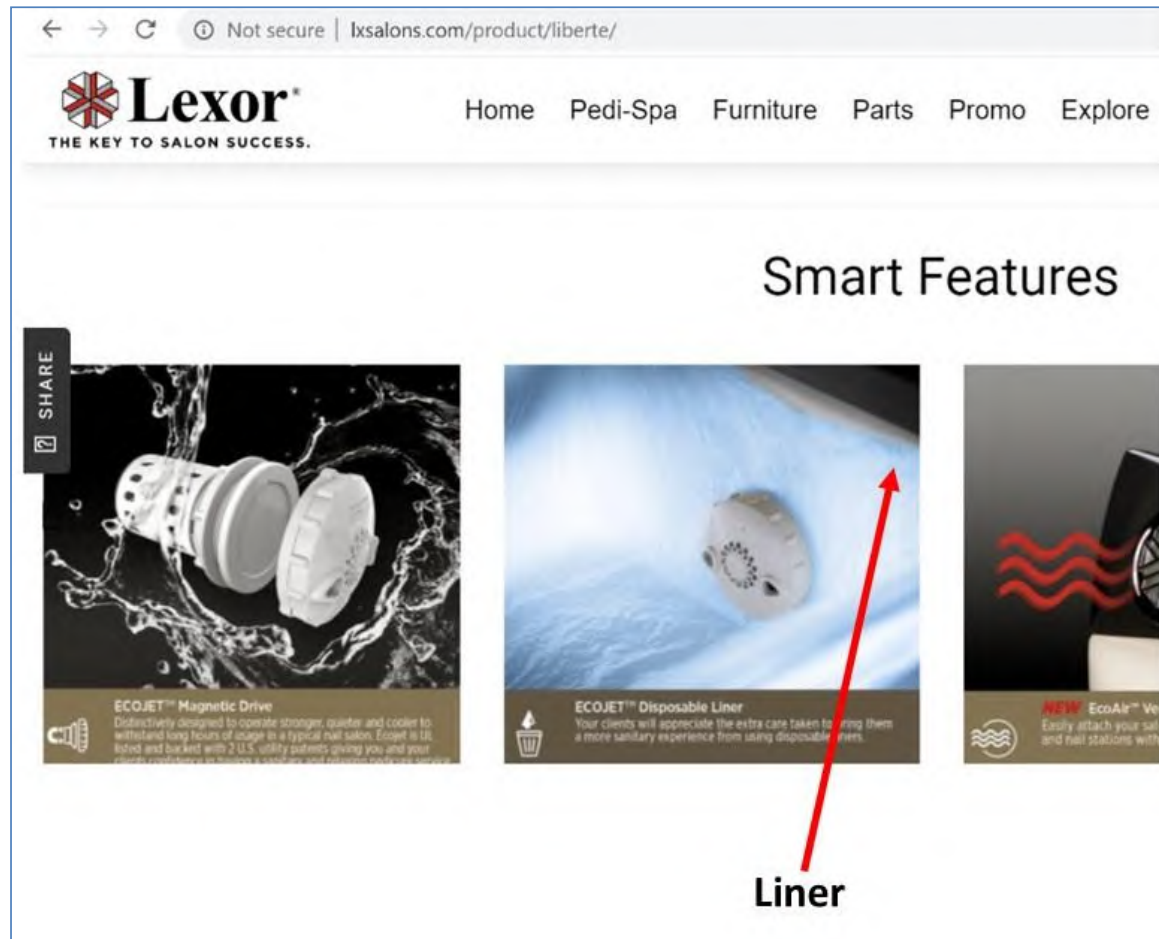
From \$2.31/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.



**1. Outer diameter
of Shaft Protection
Member**

**2. Outer diameter
of Outer Bearing
Member**



1. Prestige model



https://www.youtube.com/watch?time_continue=26&v=kuwENge4QyU (Second 20 shows EcoJet)



(Cropped on Oct 19, 2020)

2. Model Elite



https://www.youtube.com/watch?time_continue=4&v=j3YRg7n8_Pc (Second 19 shows EcoJet)

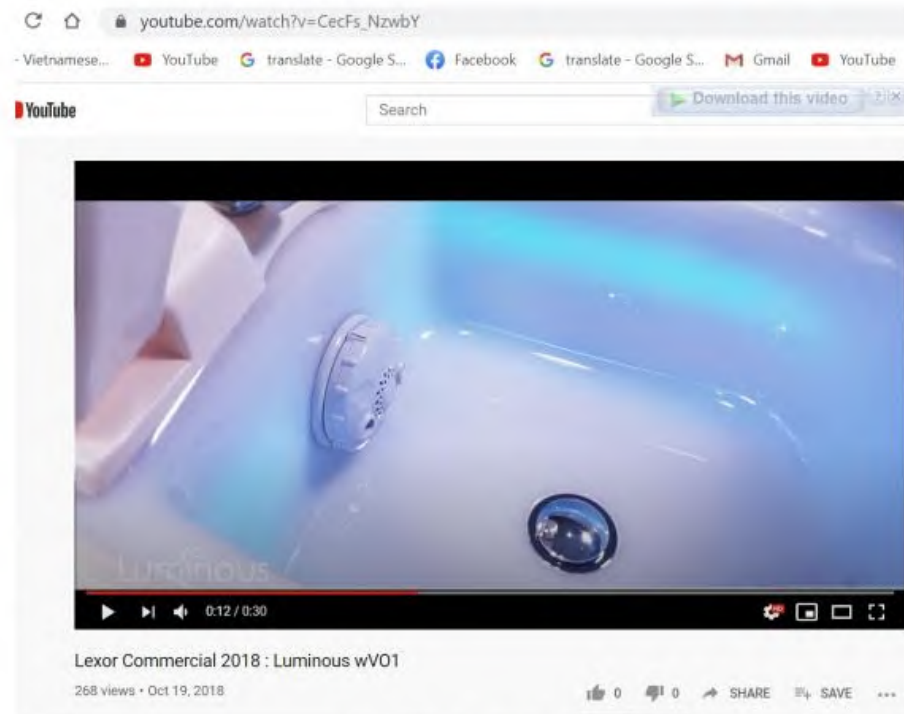


(Cropped on Oct 19, 2020)

3. Model Luminous



https://www.youtube.com/watch?v=CecFs_NzwbY (Second 22 mentions EcoJet)



(Cropped on Oct 19, 2020)

6. Liberte model



Not secure | lexorcanada.com/product/liberte/

YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for

Not secure | lexorcanada.com/product/liberte/

YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for

Lexor®
Smart Pedi-Spa. Smart Choice.

PEDICURE SPA FURNITURE ACCESSORIES SPA PARTS CONTACT

Description

Description

For those salons that are constantly pushing the boundaries of class and elegance, Lexor presents: The Liberte™. Keep your clients in awe as they partake in this limitless experience. From the luxurious and high-performing Ultraleather™, to the elegant wood trim to the glowing Aurora LED Color-Changing Bowl, the Liberte™ boasts exclusive stature that only others dream of.

Smart Features:

- Ecojet™ Magnetic Drive (Patent no: RE45844)
- Ecojet™ Disposable Liner
- Tru-Touch™ Shiatsu Massage System (tapping, kneading, rolling, etc.)
- Adjustable Footrest for Comfort

Additional Features:

- 1-Year Limited Warranty
- Includes Classic Curve Pedicure Stool (matching cushion color and adjustable height)
- Supple Leather Cushion
- Fully Functioning Power Seats
- Remote Control (controls seats and massage system)
- Construction: Marble Composite, High Gloss, Acetone-proof Gel Coat
- Foldable Manicure Trays with Removable Cup Holders
- Lift-up Armrest for Easy Access
- Purse/Handbag Hook
- Crystal Bowl

Cropped on Oct 19, 2020

Step 3: Slide the Motor Housing through the hole of the spa basin. Slide the Universal Adapter (backside in) onto the Motor Housing, then hand tighten the Motor Cap Lock-Nut.

Important: please let it set for a period of 1/2 hours

1. Locking Ring (used to secure mounting housing to wall of spa basin)

Trench Mark is at the 12 o'clock position

Black line is at the 6 o'clock position

Step 4: Turn the motor clockwise until it lock into place. Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug.

Male


Female

Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug (Illustrated)


lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638


BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES



ELITE Pedicure Chair
MODEL CODE | SKU : 100079
SALE
\$2,495.00
MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA
BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair

QTY. - 1 +


Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At \$1995 -&- Complete 5-piece Spa Package Starts At \$2495 FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

LEXOR

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53"/74" (Upright / Reclined)

31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (optional)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

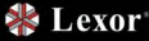
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 🏠 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRIVÉ Lounge Pedicure Chair

PROMOTION

\$4,495.00

MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: **IVORY**

BASE COLOR: **BLACK MOONSTONE**

MODEL: **PRIVÉ Lounge Pedicure Chair**

QTY:

Order a complete 5-piece package with a matching n

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/private-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **71**
- HEIGHT (Upright/Reclined): **84**
- WIDTH (Trays Closed/Open): **34/49**
- Weight (lb.): **350**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 60W

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 400 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000**

Lexor

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,999.00~~

From \$231/month with **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS

CUSHION COLOR: COLA

BASE COLOR: DARK WALNUT


MODEL: ENVISION Pedicure Chair

QTY. - 1 +

ADD TO CART BUY IT NOW APPLY FOR FINANCING

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



lexor.com/products/envision-pedicure-chair?variant=41769101852838

FREE SHIPPING For All Orders Over \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor®

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

53 1/2\"/>

31 1/2\"/>

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 500 GPH At Floor Level


Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

LEXOR® CARE

← → ↻ 📄 lexor.com/products/infinity-pedicure-chair?variant=41769152676006


 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO





The image shows a high-end, brown leather pedicure chair with a black base and a matching black footrest. A small, matching black stool is positioned to the left of the chair. The chair has a high backrest, armrests, and a control panel on the side of the base.

INFINITY Pedicure Chair

SALE
\$1,995.00
MSRP \$2,795.00

From \$185/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair ▾

QTY.

Order a complete 5-piece package with a matching

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

lexor.com/products/Infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

53"/74" (Upright / Reclined) 31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (lb.): 260
- Water Capacity (gal.): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.


FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

← → ↻ 📄 lexor.com/products/liberte-pedicure-chair?variant=41768706244774


BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**


 **Lexor®**


PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO

LIBERTÉ Pedicure Chair

SALE
\$2,395.00
~~MSRP: \$3,195.00~~

From \$222/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS


CUSHION COLOR: COLA


BASE COLOR: ESPRESSO

MODEL: LIBERTÉ Pedicure Chair ▾


QTY:

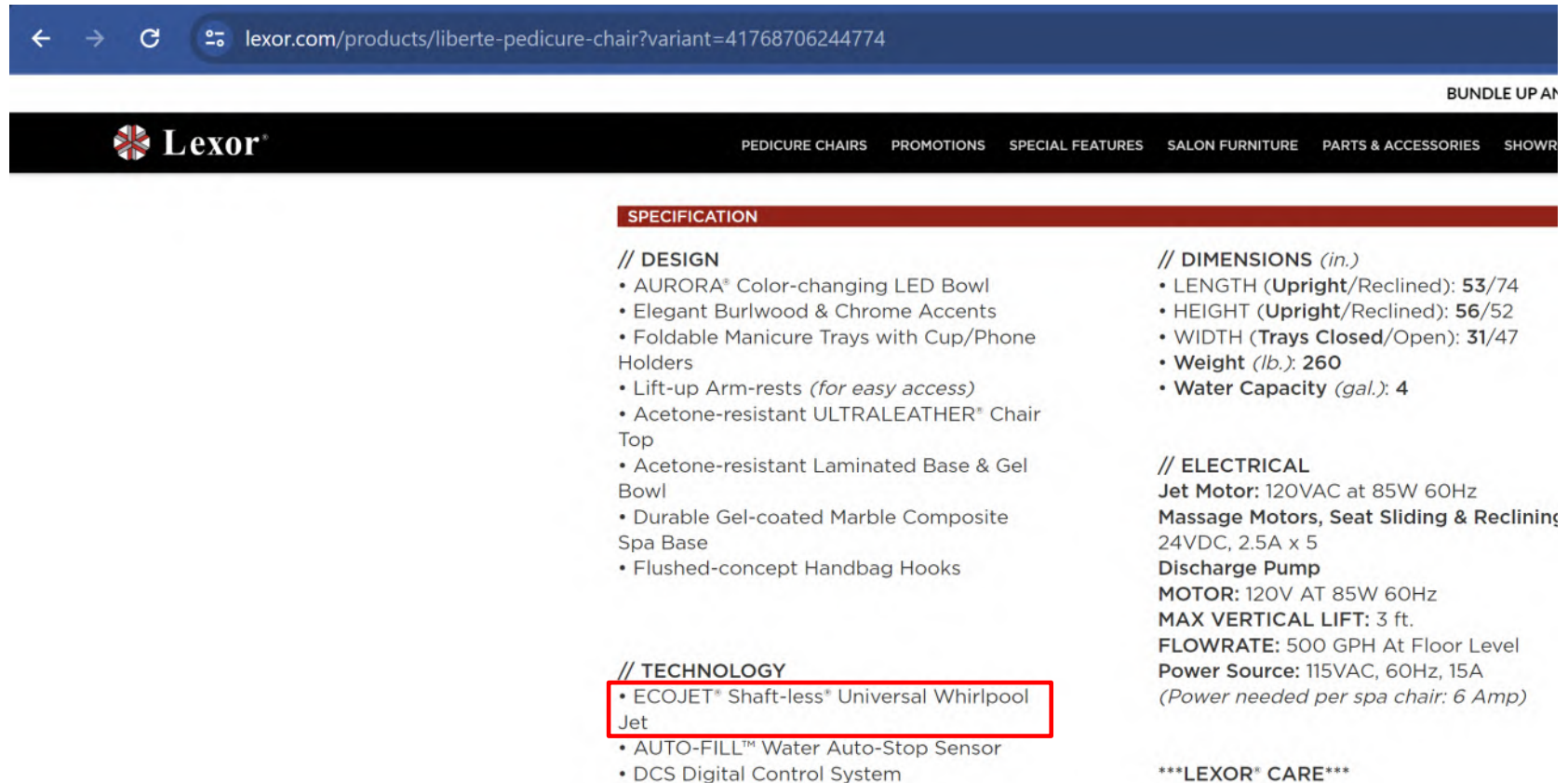
Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

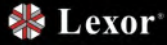
BUYER OUTSIDE OF NORTH AMERICA






lexor.com/products/prestige-pedicure-chair?variant=41769011576998

BUNDLE 1

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW





PRESTIGE Pedicure Chair

SALE


\$2,495.00

MSRP: ~~\$2,900.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



PEDI-BOWL COLOR: WHITE PEARL

MODEL: PRESTIGE Pedicure Chair

QTY: 1


ADD TO CART **BUY IT NOW**

SEE PROMOS


BUYER OUTSIDE OF NORTH AMERICA

← → ↻ 📄 lexor.com/products/prestige-pedicure-chair?variant=41769011576998

g Interest Rate As Low As 1% With Credit Key

 **Lexor®**

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (*in.*)

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight (*lb.*): 260
- Water Capacity (*gal.*): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

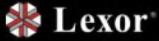
Power Source: 115VAC, 60Hz, 15A

(*Power needed per spa chair: 6 Amp*)

LEXOR® CARE

← → ↺ lexor.com/products/luminous-pedicure-chair?variant=41753030033574

BUNDLE


 **PEDICURE CHAIRS** PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO


LUMINOUS Pedicure Chair

SALE


\$2,195.00

MSRP: ~~\$2,995.00~~

From \$203/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL LUMINOUS Pedicure Chair ▾


QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART BUY IT NOW

SEE PROMOS


BUYER OUTSIDE OF NORTH AMERICA



lexor.com/products/luminous-pedicure-chair?variant=41753030033574

JP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53"/74" (Upright / Reclined) 31"/47" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

US 10,215,178 Claim Language	Evidence of Infringement EcoJet Universal 3.5 (Shafted)
<p>1. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:</p>	<p>The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html. See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.</p>
<p>a) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,</p>	<p>As shown in Fig. 4, 11(5-7, and 9) , and 14(1 and 4) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing.</p>
<p>b) wherein said bearing assembly comprises an outer bearing member and an inner bearing member,</p>	<p>As shown in Fig. 14(4-6) and 15(1-3) the bearing assembly comprises an outer bearing member and a inner bearing member.</p>
<p>c) wherein said outer bearing member is dimensioned and configured such that a first end of said outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use,</p>	<p>As shown in Fig. 14(2 and 4-9) and 15(1-3) the outer bearing member has a diameter and is dimensioned and configured such that a first end of the outer bearing member is rotated above a top surface of a base of a shaft protection member during operational use.</p>
<p>d) wherein said inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use, and</p>	<p>As shown in Fig. 14(6) and 15(2) the inner bearing member is manufactured of a rubber that is able to absorb vibration during operational use.</p>
<p>e) wherein said inner bearing member is dimensioned and configured such that said inner bearing member is rotated around a shaft member,</p>	<p>As shown in Fig. 14(6-7) the inner bearing member is dimensioned and configured such that the inner bearing member is rotated around a shaft member.</p>
<p>f) wherein said shaft assembly comprises said shaft member and said shaft protection member,</p>	<p>As shown in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises the shaft member and the shaft protection member.</p>

<p>g) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,</p>	<p>As shown in Fig. 14(2 and 4) and 17(2) the shaft protection member comprises base that comprises a top surface, a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing, and wherein the shaft protection member is manufactured of a ceramic.</p>
<p>h) wherein said shaft member extends through an inner surface of said jet assembly housing,</p>	<p>As shown in Fig. 13(5), 14(3), and 18(3) the shaft member extends through the inner surface of the jet assembly housing.</p>
<p>i) wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,</p>	<p>As shown in Fig. 19(4 and 7) and 20(4-5) the magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use.</p>
<p>j) wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,</p>	<p>As shown in Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture.</p>
<p>k) wherein said base of said jet assembly housing comprises an inner surface and an outer surface,</p>	<p>As shown in Fig. 18(1-2) the base of said jet assembly housing comprises an inner surface and an outer surface.</p>
<p>l) wherein said front cover comprises an inner surface and an outer surface,</p>	<p>Again, referring to Fig. 11(11) and 13(7) the front cover comprises an inner surface and an outer surface.</p>
<p>m) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another, and</p>	<p>Referring to Fig. 19(2-4) and 20(2-3 and 5) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.</p>

<p>n) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and</p>	<p>Again, referring to Fig. 19(4 and 7) and 20(4-5) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.</p>
<p>o) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,</p>	<p>As shown in Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprises a top surface, a bottom surface, and a shoulder (where the gasket is applied to) dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries.</p>
<p>p) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.</p>	<p>As shown Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.</p>
<p>3. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said hard material of said shaft protection member is ceramic.</p>	<p>As shown in Fig. 14(2) and 17(2) the shaft protection member is believed to be ceramic or ceramic-type material.</p>
<p>4. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said top surface of said base of said shaft protection member is polished.</p>	<p>As shown in Fig. 14(2) and 17(2) the top surface of said base of said shaft protection member is polished.</p>
<p>5. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft assembly and said bearing assembly align an axis of rotation of said magnetic impeller with an axis of rotation of a driving magnetic plate mounted to a motor, and wherein said shaft assembly is secured to said base of said jet assembly housing and said bearing assembly is secured to a center of said magnetic impeller within said jet assembly housing.</p>	<p>As shown in Fig. 4, 8(1, 4, and 6), 10(1-3), 11(5-7), 19(2, 4, and 7), and 20(3, 4 and 5) the shaft assembly and bearing assembly align an axis of rotation of the magnetic impeller with an axis of rotation of the magnetic plate mounted on the motor, and the shaft assembly is secured to the base of the jet assembly housing and the bearing assembly is secured to the center of the magnetic impeller within the jet assembly housing.</p>

<p>6. The combination jet assembly and mounting housing member apparatus according to claim 2, wherein said first end of said outer bearing member and said first end of said inner bearing member are substantially flush with a rear side of said magnetic impeller when said outer bearing member and said inner bearing member are positioned within said cavity of said magnetic impeller.</p>	<p>As shown in Fig. 14(5-9) the first end of said outer bearing member and said first end of said inner bearing member are substantially flush with a rear side of said magnetic impeller when said outer bearing member and said inner bearing member are positioned within said cavity of said magnetic impeller.</p>
<p>7. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein, when in operational use, said shaft assembly is stationary.</p>	<p>As shown in Fig. 4, 11(5-7), and 14(1 and 3) the shaft assembly is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operational use.</p>
<p>8. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said shaft member is manufactured of steel or a metal material.</p>	<p>As shown in Fig. 14(3) and 17(1) the shaft member is of steel or a metal material.</p>
<p>9. A combination jet assembly and mounting housing member apparatus of a magnetic coupling-type pump used for dispensing a fluid to an environment in manicure and pedicure industries, said combination jet assembly and mounting housing member apparatus comprising:</p>	<p>The Ecojet Universal 3.5 is sold as the EcoJet II Magnetic Drive and the Ecojet Magnetic Jet Universal. EcoJet II Magnetic Drive Kit is described online by Pro Spa Depot at https://prospadepot.com/ecojet-magnetic-ii.html. See Fig 21. Additionally the Ecojet Magnetic Jet Universal was described on the Ecojet Website when it was still up. See Fig 2-3 and 22.</p>
<p>a) a jet assembly comprising a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing,</p>	<p>As shown in Fig. 4, 11(5-7, and 9) , and 14(1 and 4) the jet assembly comprises a bearing assembly, a shaft assembly, a magnetic impeller, and a jet assembly housing.</p>
<p>b) wherein said bearing assembly comprises at least one bearing member,</p>	<p>Again, referring to Fig. 15(1-3), the bearing assembly comprises at least one bearing member.</p>

<p>c) wherein said at least one bearing member is dimensioned and configured such that an inner surface of said at least one bearing member is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use,</p>	<p>As shown in Fig. 14(3-4 and 6-9) the inner bearing is rotated around a shaft member and a first end of said at least one bearing member is rotated above a top surface of a base of a shaft protection member during operational use.</p>
<p>d) wherein said shaft assembly comprises said shaft member and said shaft protection member,</p>	<p>As indicated in Fig. 14(1-3) and 17(1-2) the shaft assembly comprises the shaft member and the shaft protection member.</p>
<p>e) wherein said shaft protection member comprises a base that comprises a top surface, a bottom surface, and a base diameter, wherein said base of said shaft protection member is positioned between said bearing assembly and a base of said jet assembly housing, and wherein said shaft protection member is manufactured of a hard material,</p>	<p>As seen in Fig. 14(2) and 17(2) the shaft protection member comprises a base that comprises a top surface, a bottom surface, and a diameter, and the base of the shaft protection member is positioned between the bearing assembly and the base of the jet assembly housing, and the shaft protection member is manufactured of a ceramic (or ceramic-like) material.</p>
<p>f) wherein said shaft member extends through an inner surface of said jet assembly housing,</p>	<p>As shown in Fig. 13(5), 14(3), and 18(3) the shaft member extends through the inner surface of the base of jet assembly housing.</p>
<p>g) wherein said magnetic impeller defines a cavity, is positioned within an impeller-receiving chamber of said jet assembly housing, and is dimensioned and configured to rotate within said impeller-receiving chamber during operational use,</p>	<p>As shown in Fig. 19(4 and 7) and 20(4-5) the magnetic impeller is positioned within the chamber of the housing and configured to rotate within the chamber of the housing where the rotation of the magnetic impeller causes the fluid to flow through the inlet aperture and enter into the chamber of the housing to flow through the outlet aperture and exit from the chamber of the housing.</p>
<p>h) wherein said jet assembly housing comprises said inner surface, an outer surface, said base, a front cover, said impeller-receiving chamber, at least one inlet aperture, and at least one outlet aperture,</p>	<p>As shown in Fig. Fig. 4, 7(3-4), 11(1-4, and 8-11), 13(6), 18(1-2), and 19(1, 4, and 6) the jet assembly housing comprises an inner surface, an outer surface, a base, a front cover, an impeller-receiving chamber, at least one inlet aperture and at least one outlet aperture.</p>

i) wherein said base of said jet assembly housing comprises an inner surface and an outer surface,	As shown Fig. 18(1-2) the base of the jet assembly housing comprises an inner surface and an outer surface.
j) wherein said front cover comprises an inner surface and an outer surface,	As shown Fig. 11(11) and 13(7) the front cover comprises an inner surface and an outer surface.
k) wherein said impeller-receiving chamber is defined by said base and said front cover of said jet assembly housing when said base and said front cover of said jet assembly housing are secured to one another, and	As shown Fig. 19(2-4) and 20(2-3 and 5) the impeller-receiving chamber is defined by the base and the front cover of the jet assembly housing when the base and the front cover of the jet assembly housing are secured to one another.
l) wherein said impeller-receiving chamber is dimensioned and configured to receive said magnetic impeller and to allow said magnetic impeller to rotate within said impeller-receiving chamber during operational use; and	Again, referring to Fig. 19(4 and 7) and 20(4-5) the impeller-receiving chamber is dimensioned and configured to receive the magnetic impeller and to allow the magnetic impeller to rotate within the impeller-receiving chamber during operational use.
m) a mounting housing member comprising a top surface, a bottom surface, and a shoulder dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries,	As shown Fig. 8(4-5 and 7) and 12(1) the mounting housing member comprising a top surface, a bottom surface, and a shoulder (where the gasket is applied to) dimensioned and configured to mount to a wall of a basin in the manicure and pedicure spa industries.
n) wherein said jet assembly is magnetically coupled to said top surface of said mounting housing member while a motor assembly is secured to said bottom surface of said mounting housing member.	As shown Fig. Fig. 4, 8(1-6), and 9(1) the jet assembly is magnetically coupled to the top surface of the mounting housing member while a motor assembly is secured to the bottom surface of the mounting housing member.
11. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein at least a portion of said at least one bearing member is manufactured of a plastic material.	As shown in Fig. 15(3) the outer bearing member is manufactured of a plastic material.

12. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said top surface of said base of said shaft protection member is polished.	As shown in Fig. 14(2) and 17(2) the base of the shaft protection member is polished.
13. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said shaft member is manufactured of steel or a metal material.	As shown in Fig. 14(3), 17(1), and 18(3) the shaft member is manufactured of steel.
14. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said hard material is ceramic.	The base of the shaft protection member is manufactured of ceramic or a ceramic-like material as shown in Fig. 14(2) and 17(2).
15. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said mounting housing member further comprises at least one mounting leg.	As shown in Fig. 8(3) the mounting housing member comprises at least one mounting leg.
16. The combination jet assembly and mounting housing member apparatus according to claim 15, wherein said at least one mounting leg is dimensioned and configured for receiving a wing nut.	As shown in Fig. 8(2-3) the mounting housing member comprises at least one mounting leg and is dimensioned and configured for receiving a wing nut.
17. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein, when in operational use, said shaft assembly is stationary.	As shown in Fig. 4, 11(5-7), and 14(1 and 3) the shaft assembly is mounted in an immovable position while the impeller has a bearing assembly that allows the impeller to rotate about the immovable shaft member while in operational use.
22. The combination jet assembly and mounting housing member apparatus according to claim 1, wherein said base of said shaft protection member makes contact with said first end of said outer bearing member during operational use.	As shown Fig. 4, 14(2, 5, and 7), 19(7) and 20(4) the base of the shaft protection member makes contact with the first end of the outer bearing member during operational use.

<p>23. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein an inner surface of an innermost member of said at least one bearing member is manufactured of a rubber material that is able to absorb vibration during operational use and is generally smooth for a substantial portion of said inner surface of said innermost member.</p>	<p>As shown in Fig. 15(2) the inner bearing member is manufactured of a rubber material that is able to absorb vibration during operational use and is generally smooth for a substantial portion of inner surface.</p>
<p>25. The combination jet assembly and mounting housing member apparatus according to claim 9, wherein said top surface of said base of said shaft protection member makes contact with said first end of said at least one bearing member during operational use.</p>	<p>As shown Fig. 4, 14(2, 5, and 7), 19(7) and 20(4) the base of the shaft protection member makes contact with the first end of the outer bearing member during operational use.</p>

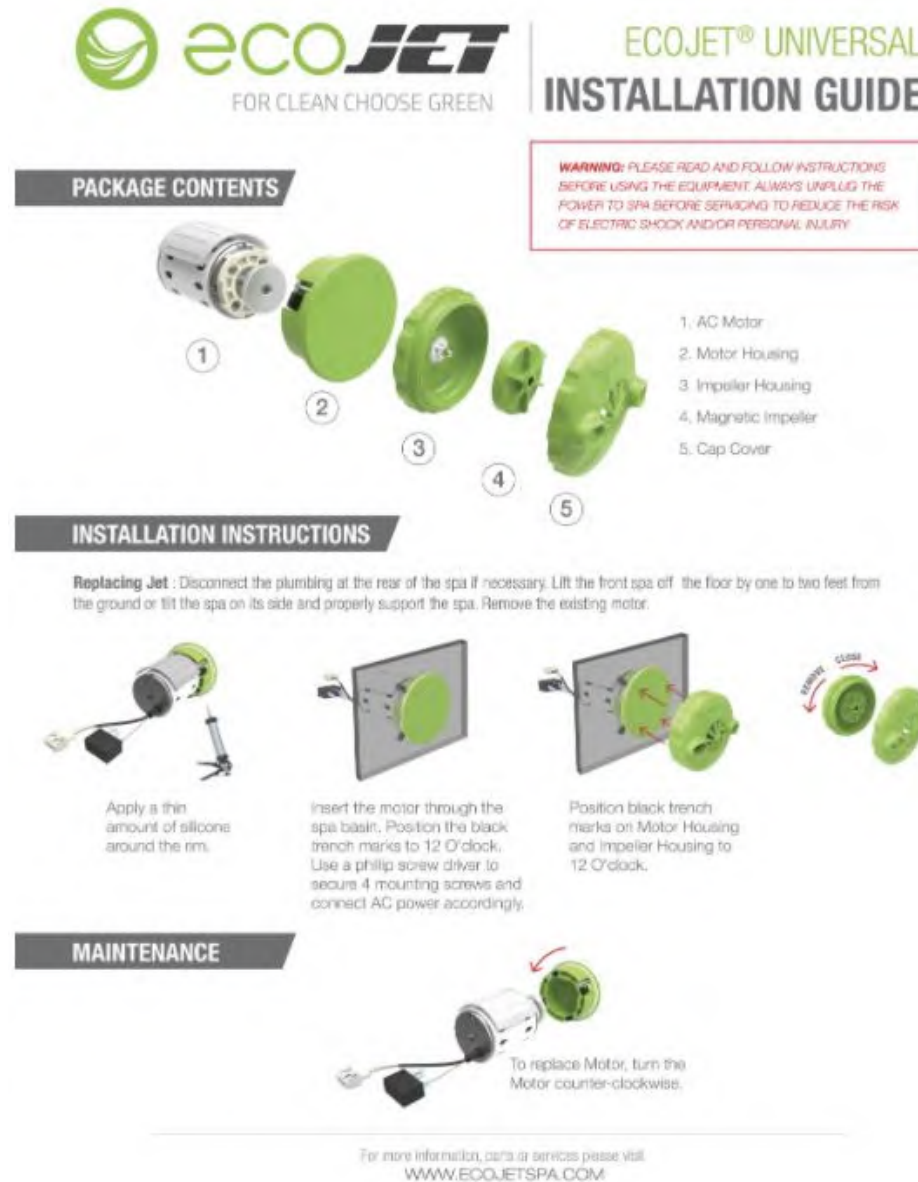
Figures for Ecojet Universal 3.50/
Second Model/Version
Shafted EcoJet II

Ecojet II magnetic drive jet
Option - wet cover & dry motor









lexor.com/product/ecojet-universal-jet-set-3-5-gray/

e... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search f

Contact Showrooms Financing Free Shipping on Spa Parts \$50+ | Call or Chat with us to place your order!

Lexor
THE KEY TO SALON SUCCESS.


Home Pedi-Spa Furniture Parts Promo Explore Ideas

YOUR CART \$0.00

ALL CATEGORIES Searching for ... All Categories (888) 479-6916

Home > Spa Parts > Plumbing Parts > EcoJet Universal Jet Set 3.5- Gray

EcoJet Universal Jet Set 3.5- Gray
\$125.00
Availability: In Stock
- 1 +
ADD TO CART
SKU: ecojet-magnetic-drive-jet-kit
Categories: Plumbing Parts, Spa Parts



Description Additional information

Cropped on Oct 18, 2020



















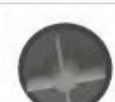















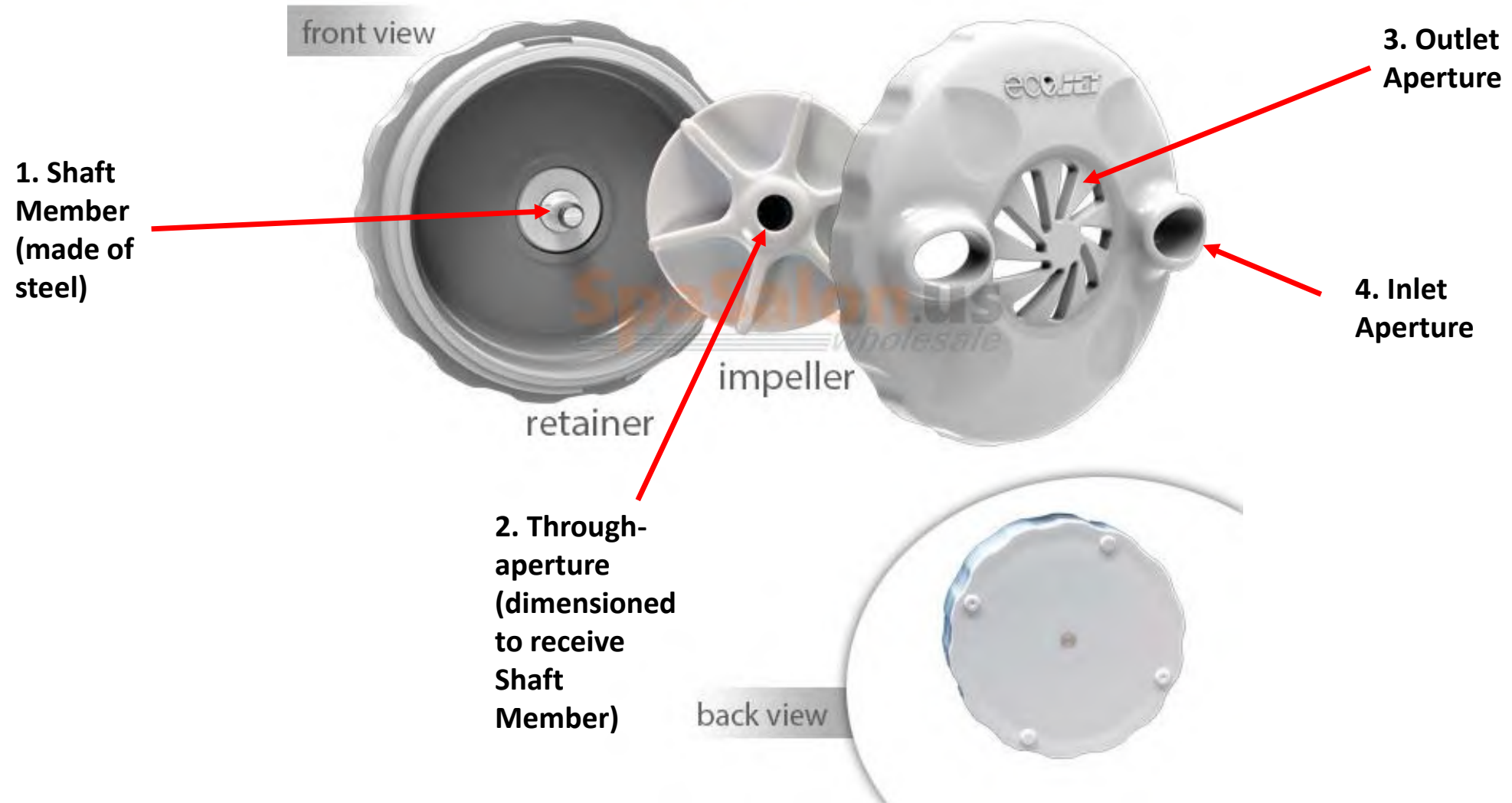
 For Clean Choose Green					
JET	MOTOR HOUSING		IMPELLER		COMPATIBILITY
ECOJET® UNIVERSAL Motor Housing & Wet-end has 4 locking dot-points.					
OTHER COMPATIBLE BRANDS Ecojet® Universal Wet-end can be replaced for other brands with 4 locking dot-points.					
OTHER JETS Ecojet® Universal Wet-end can not be used on these after market jets.					 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
					 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
		n/a			 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
					 <ul style="list-style-type: none"> • Replace with genuine Ecojet® Universal whole set.
ECOJET® 2017 Motor Housing & Wet-end has 3 locking dot-points.					

Image 2 of 2

ECO magnetic jet

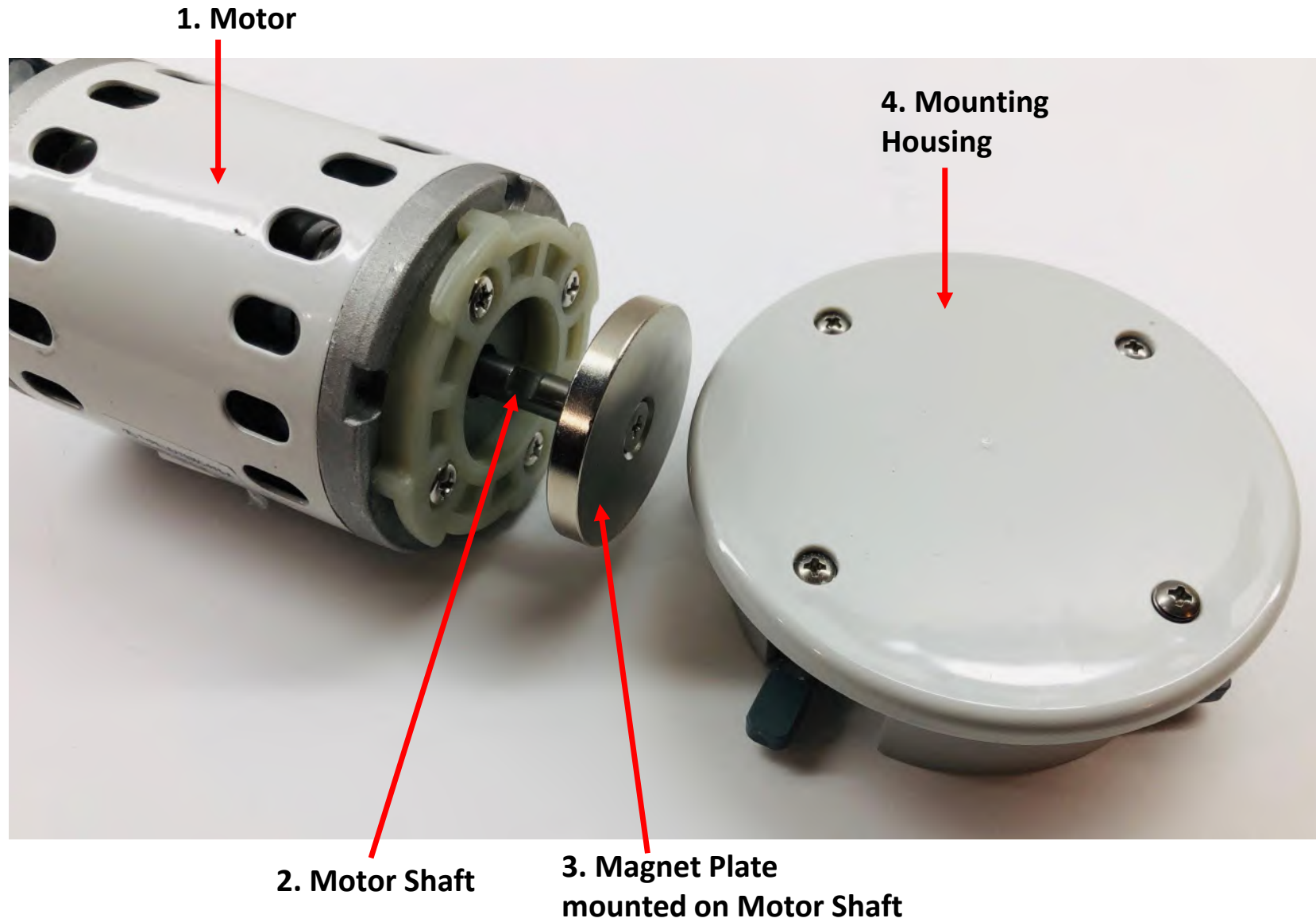
Option - new (cover + impeller + retainer)



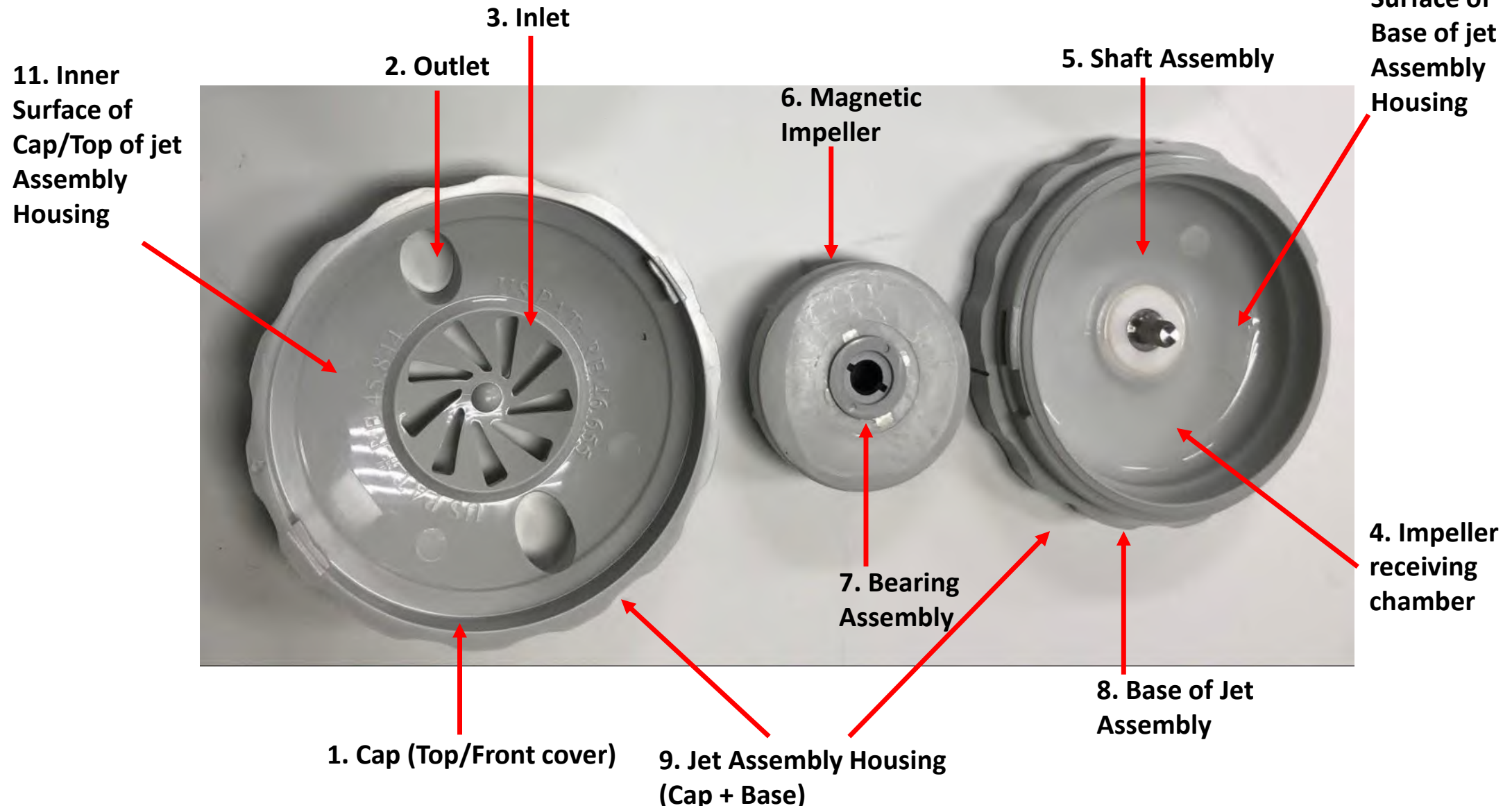


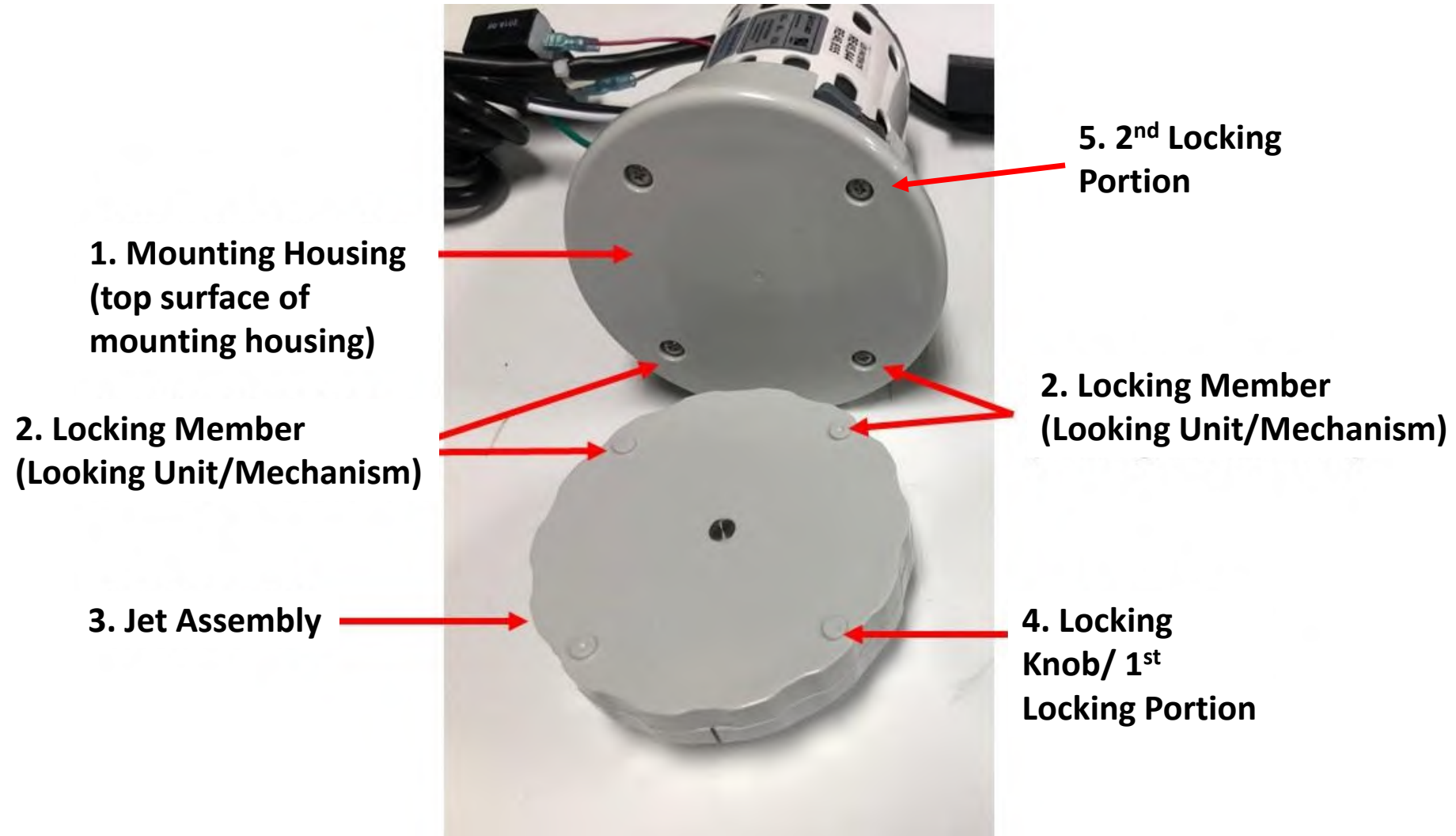
**1. Jet Assembly
(Wet-end)
(magnetically
coupled to top
surface of
Mounting
Housing)**





Jet Assembly





1. Jet Assembly

2. Inlet

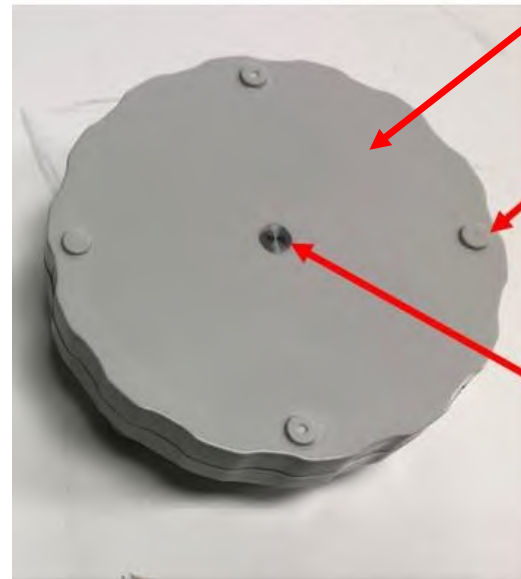
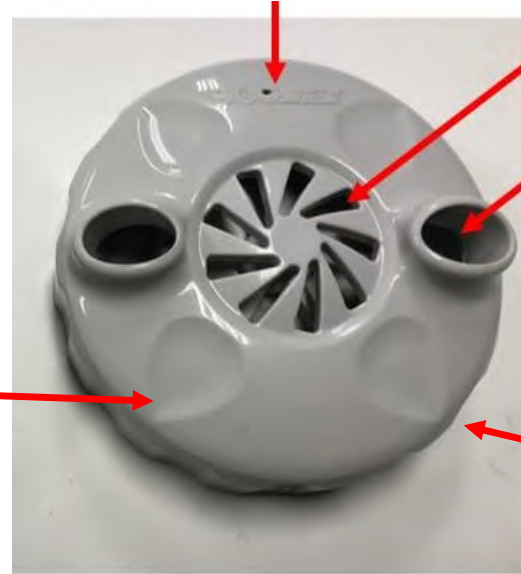
3. Outlet

**7. Outer Surface of
Cap/Top of jet
Assembly Housing**

**6. Outer Surface of Jet
Assembly Housing**

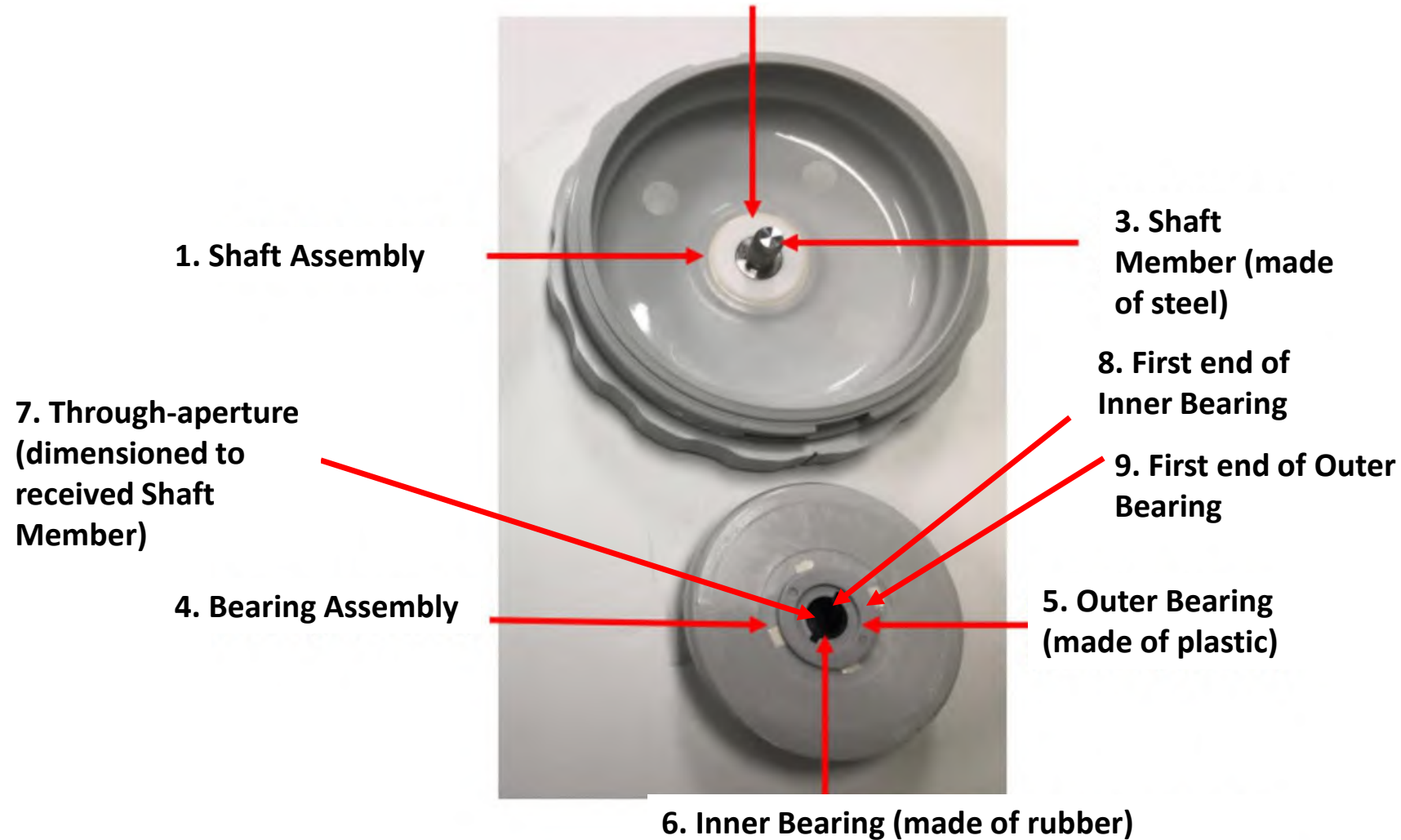
**4. Locking Knob
(locking mechanism)**

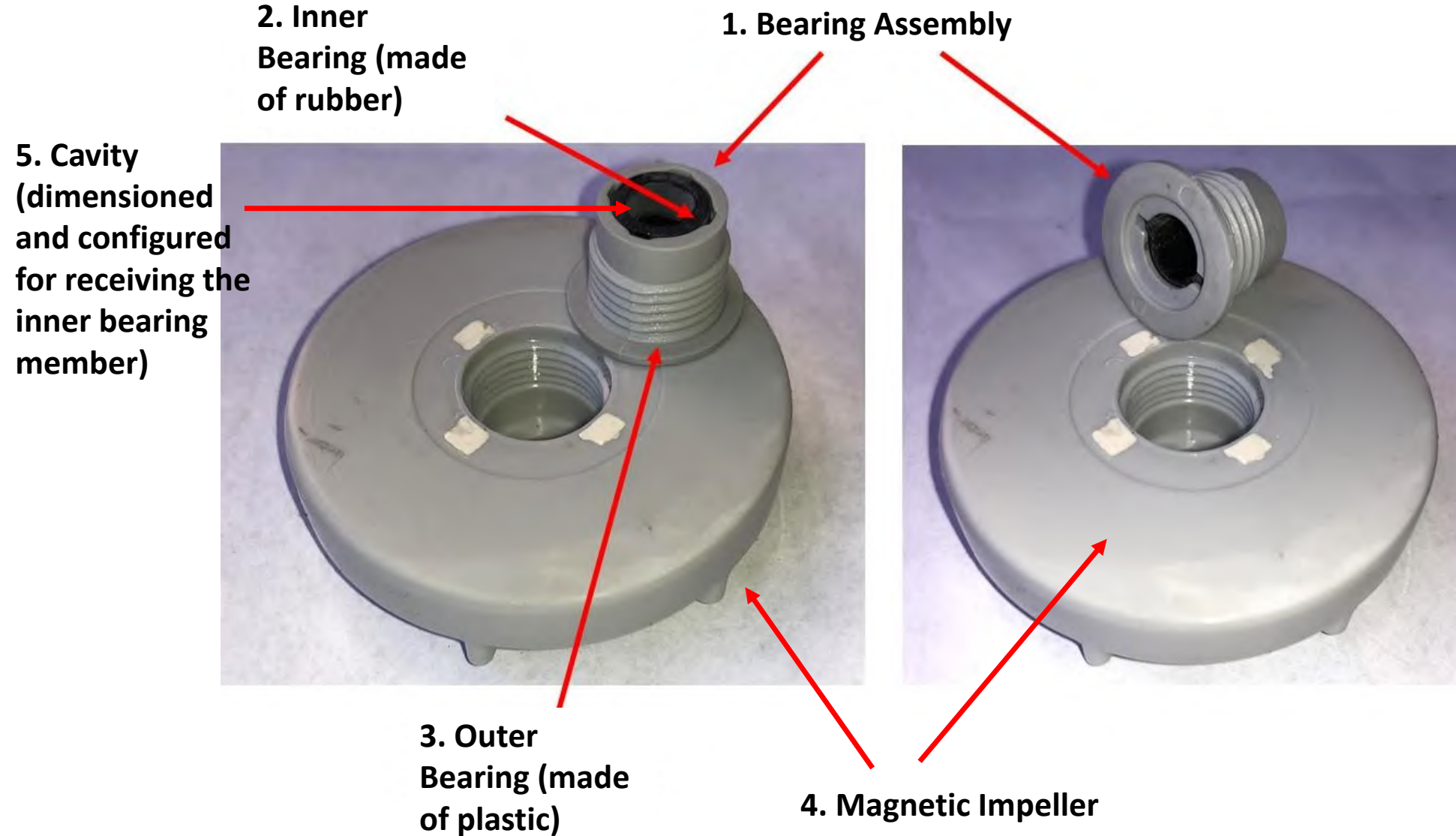
**5. Shaft Member
(extends though top
surface and bottom
surface of Base of Jet
Assembly)**



Shaft Assembly & Bearing Assembly

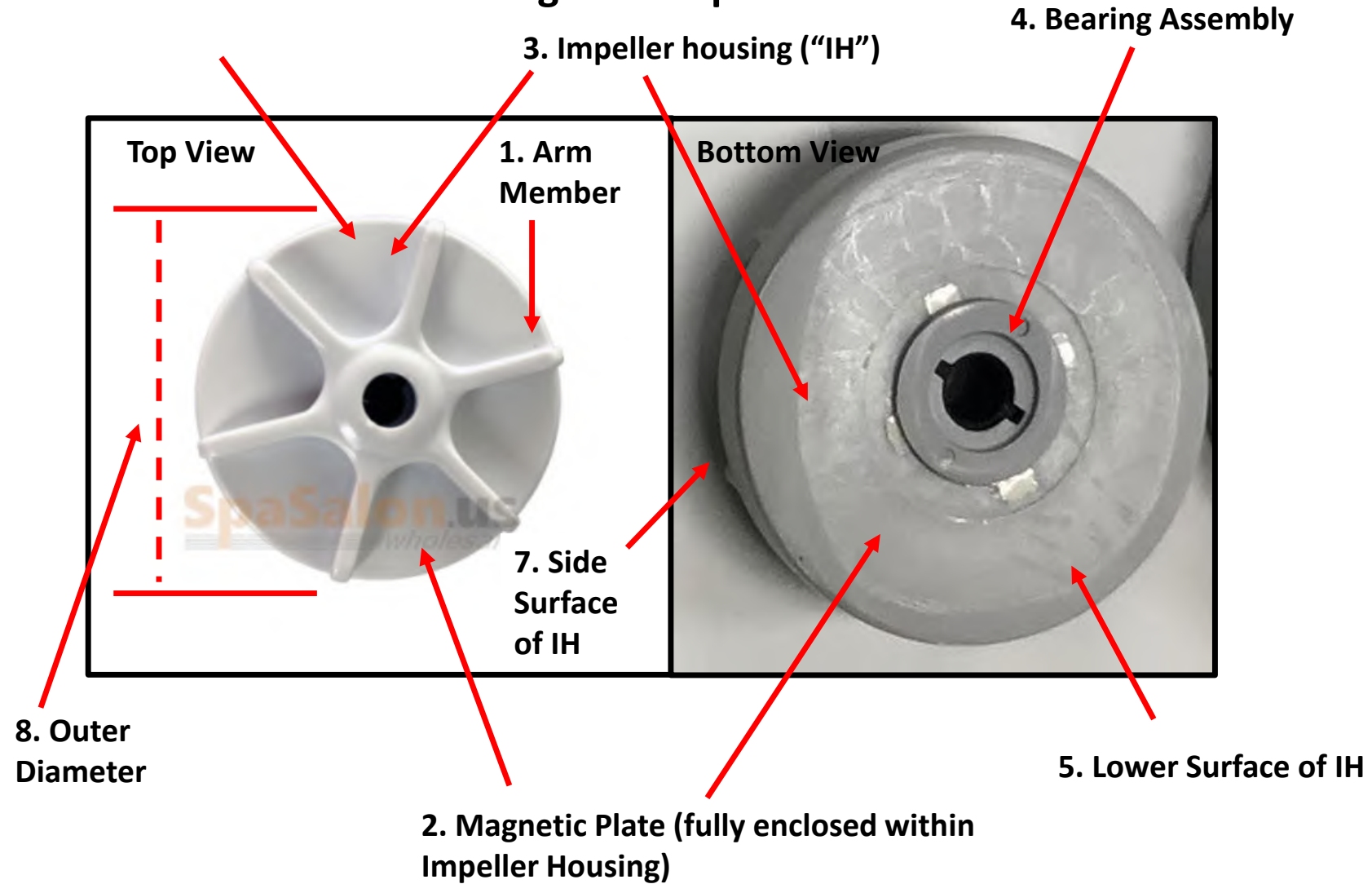
2. Shaft Protection Member
comprising of a base (made
of ceramic)

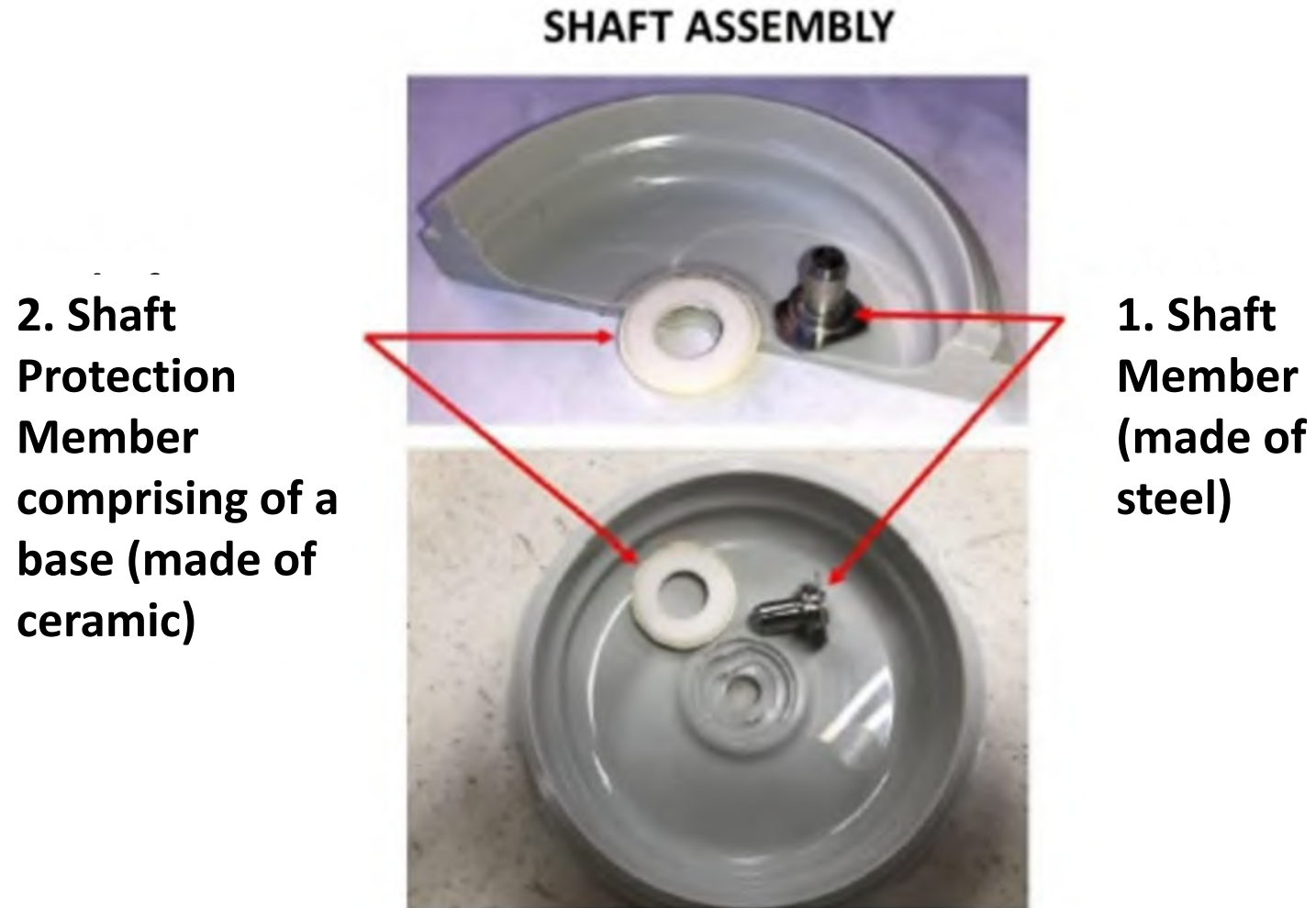




6. Upper Surface of IH

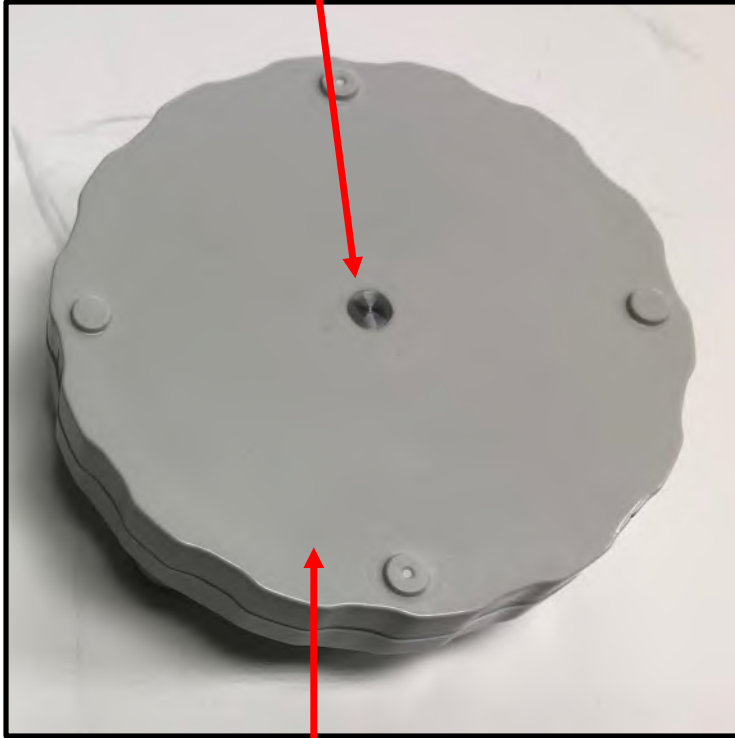
Magnetic Impeller





3. Shaft Member (extends though top surface and bottom surface of Base of Jet Assembly)

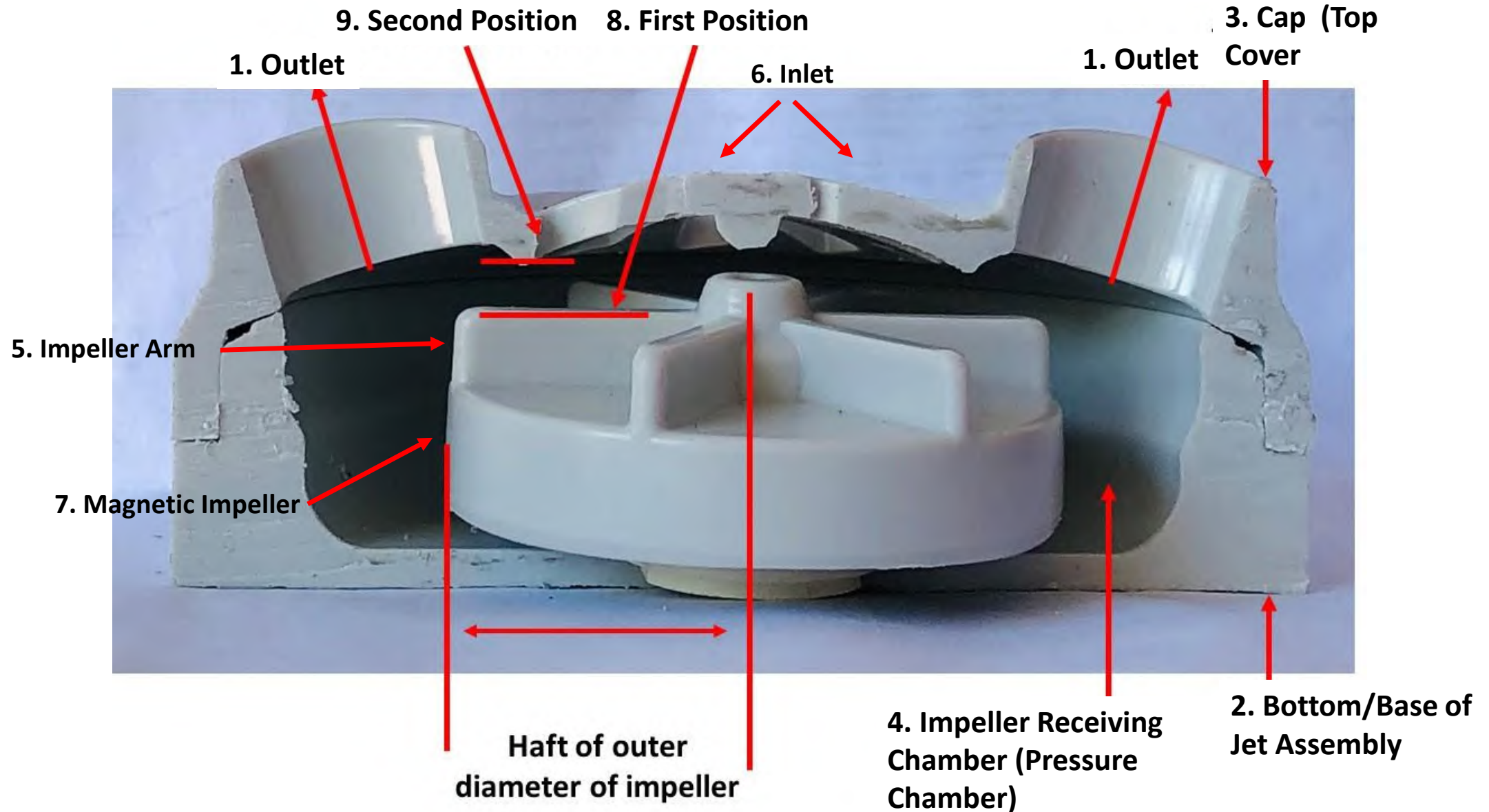
3. Shaft Member (made of steel)

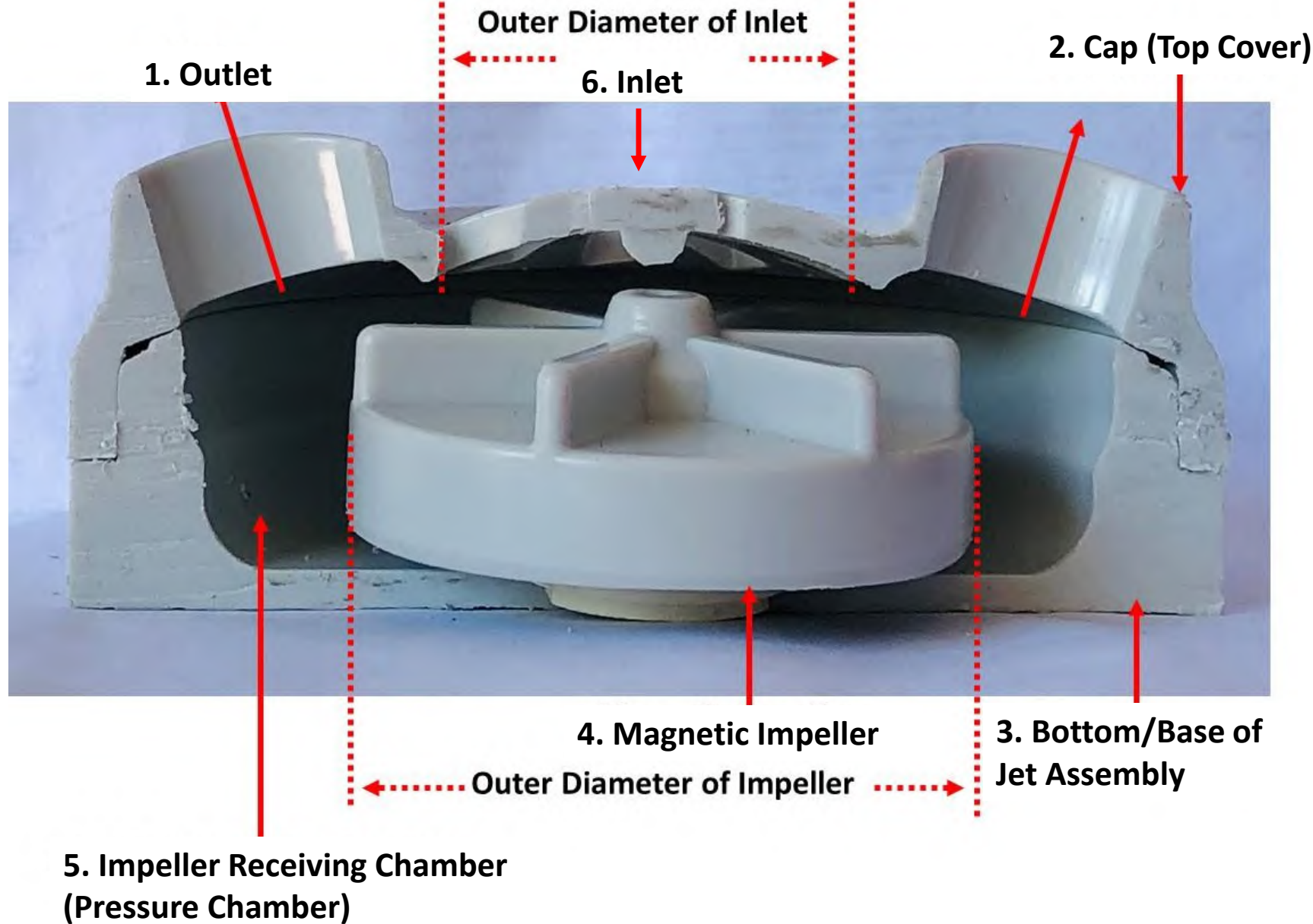


1. Outer surface of Base of Jet Assembly



2. Inner surface of Base of Jet Assembly





prospadepot.com/ecojet-magnetic-ii.html

Norred law Time Sh... Dashboard - MyCase

PSD™
Pedicure Spa & Salon Furniture Wholesaler

(714) 444-4144

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US FIND DEALERS



HOME / ACCESSORIES / WHIRLPOOL JET / ECOJET MAGNET DRIVE JET / ECOJET II MAGNETIC DRIVE

Product Code: Ecojet II Magnetic Drive

ECOJET II MAGNETIC DRIVE

Add to Wishlist | Add to Compare

f t i e + 1



DETAILS

Patented Ecojet II with Magnetic-Drive will provide a strong soothing whirlpool, easy to clean and extremely reliable. Use together with PSD Disposable Liner will bring sanitary pedicure service to a whole new level. The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized and Utilities Patented (3,272,079). This magnetic jet is assembled and tested in the U.S.A.

Retail box includes:

- Ecojet MD Magnetic Motor
- Motor Cap Lock-Nut
- Universal Adapter
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet Cap Cover
- AC Power Cord
- Manual
- Registration Card
- Ecojet Tent Card

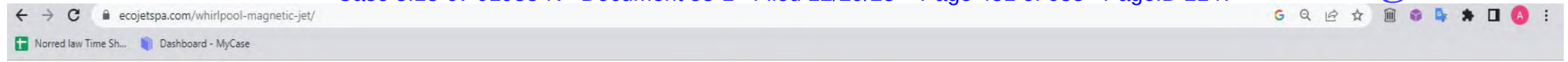
RELATED PRODUCTS

VIDEO

Ecojet Magnetic Drive Jet Commercial

Watch later | Share

Watch on YouTube | www.ecojetspa.com



HOME PRODUCTS CONTACT INFO FIND DEALERS SUPPORT

Universal Whirlpool Magnetic Jet System

(Designed for Pedicure Spa Chairs).

The Ecojet Magnetic Drive Jet takes "sanitary" to the next level. This jet system is highly efficient and reliable. With a one- year warranty, Ecojet U.L recognized, assembled & tested in the USA.

This kit is designed with advanced technology that increases the product longevity and durability. Our goal is to create the best performing whirlpool jet among competitors and most spa chairs in the market is now coming with universal fitment. The Ecojet Magnetic Drive Jet is now comes with universal fitment that fits most magnetic jets cutout for the Ecojet Universal Adapter is 3.5 inches. Any larger opening will have leakages (Please reference manual for further instructions).

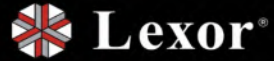
The Ecojet MD package Includes:

- Ecojet® MD Magnetic Motor
- Replacement Bushing Kit
- Motor Mounting Lever
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet® Cap Cover
- AC Power Cord



Home About Us Find Dealers Terms & Conditions

Get in touch with us →

age Starts At **\$2495****FREE SHIPPING** For All Orders Over **\$5000**Financing Interest Rate As Low As **1%** With Credit Key

PEDICURE CHAIRS

PROMOTIONS

SPECIAL FEATURES

SALON FURNITURE

PARTS & ACCESSORIES

SHOWROOMS



Disposable Liners (200ct)

EcoJet

\$25.00

From \$2.31/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS

SKU:501167

QTY.

ADD TO CART

BUY IT NOW


APPLY FOR FINANCING

SEE PROMOS

DESCRIPTION

EcoJET Pedicure Spa Liners can be used for all pedicure chairs' basins.


← → ↻ ⓘ Not secure | lxsalons.com/product/liberte/

 **Lexor®**
THE KEY TO SALON SUCCESS.


Home Pedi-Spa Furniture Parts Promo Explore

Smart Features


SHARE



ECOJET™ Magnetic Drive
Distinctively designed to operate stronger, quieter and cooler to withstand long hours of usage in a typical nail salon, Ecojet is UL listed and backed with 2 U.S. utility patents giving you and your clients confidence in choosing a sanitary and efficient pedicure service.



ECOJET™ Disposable Liner
Your clients will appreciate the extra care taken to bring them a more sanitary experience from using disposable liners.

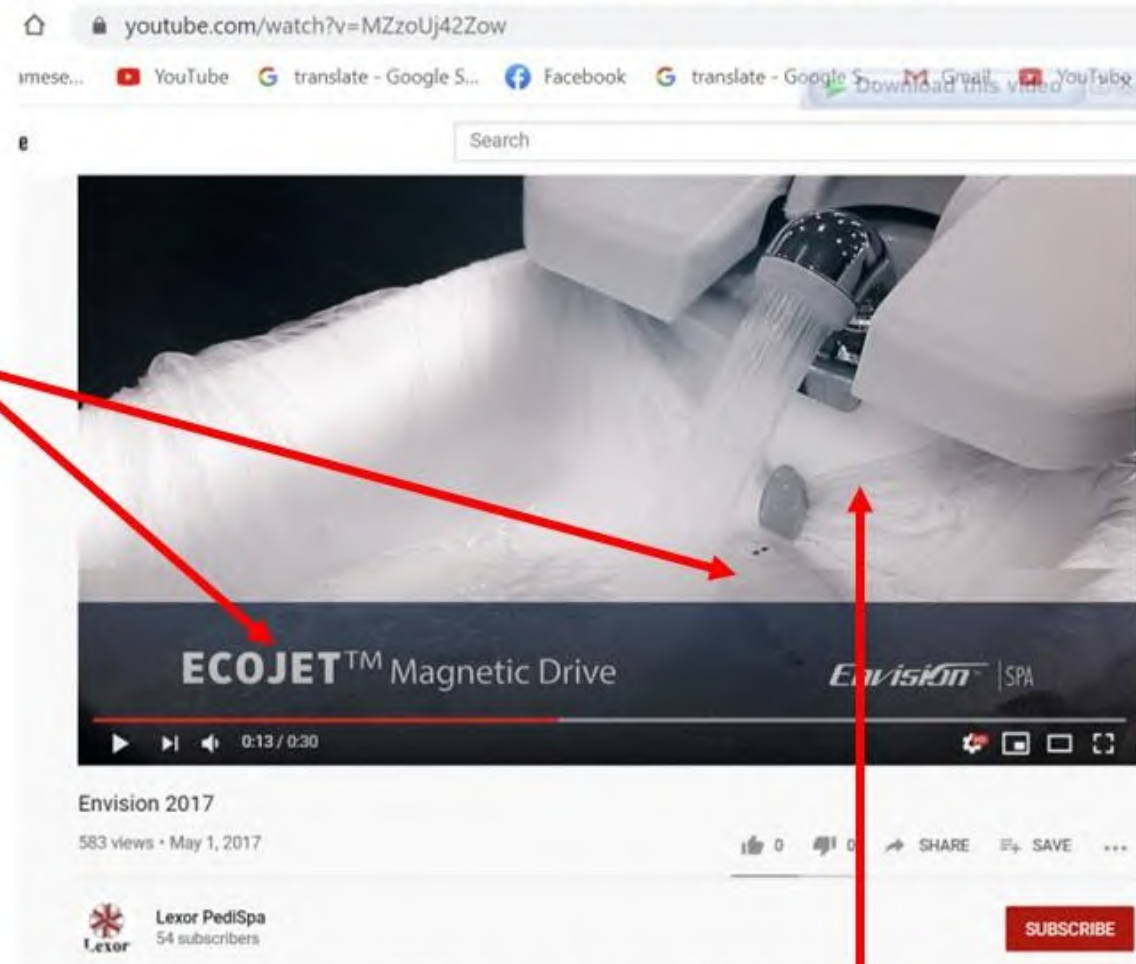


NEW EcoAir™ Ver
Easily attach your salt and nail stations with

Liner

<https://www.youtube.com/watch?v=MZzoUj42Zow> (Second 13 shows EcoJet)

EcoJet

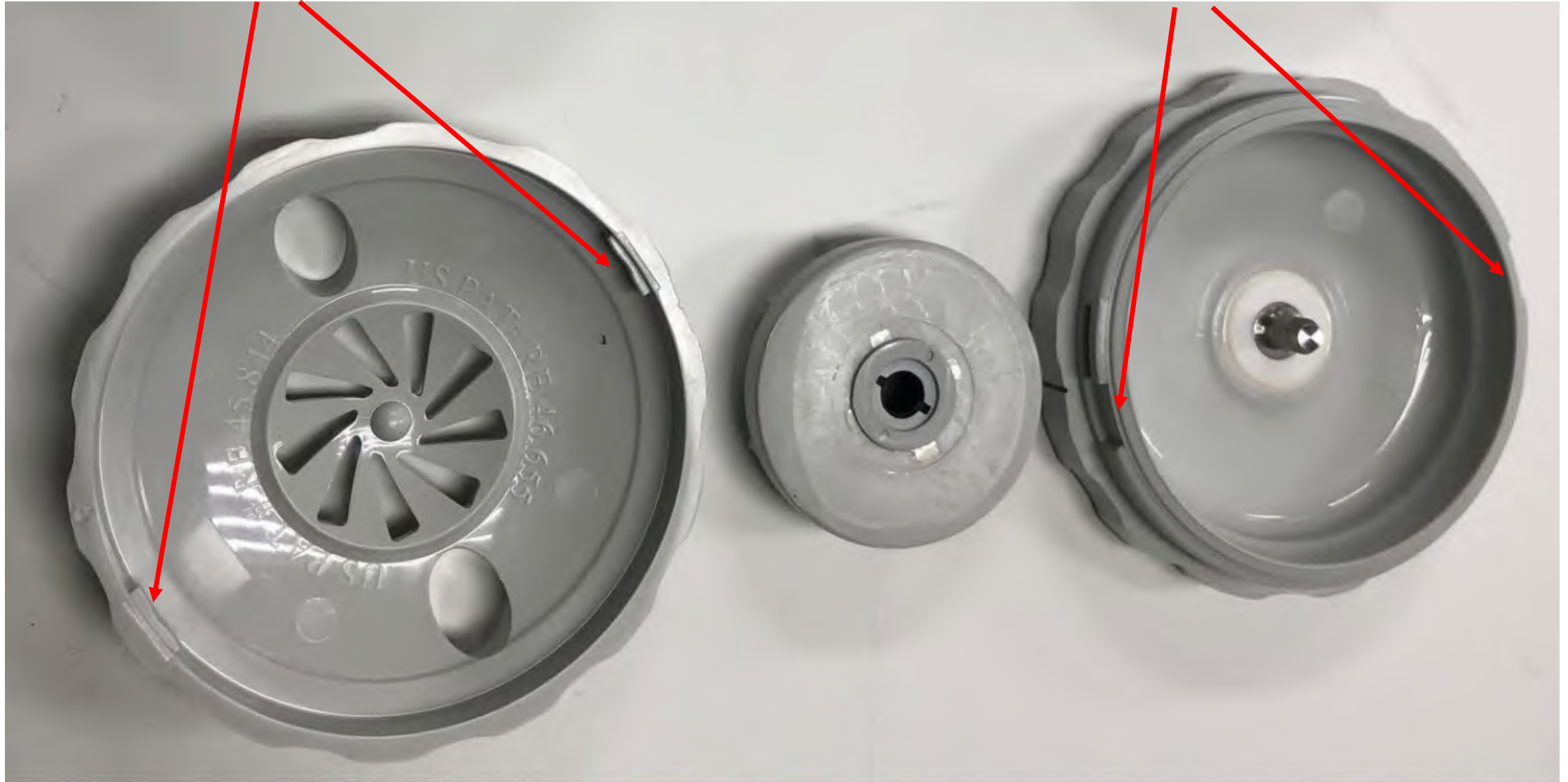


(Cropped on Oct 19, 2020)

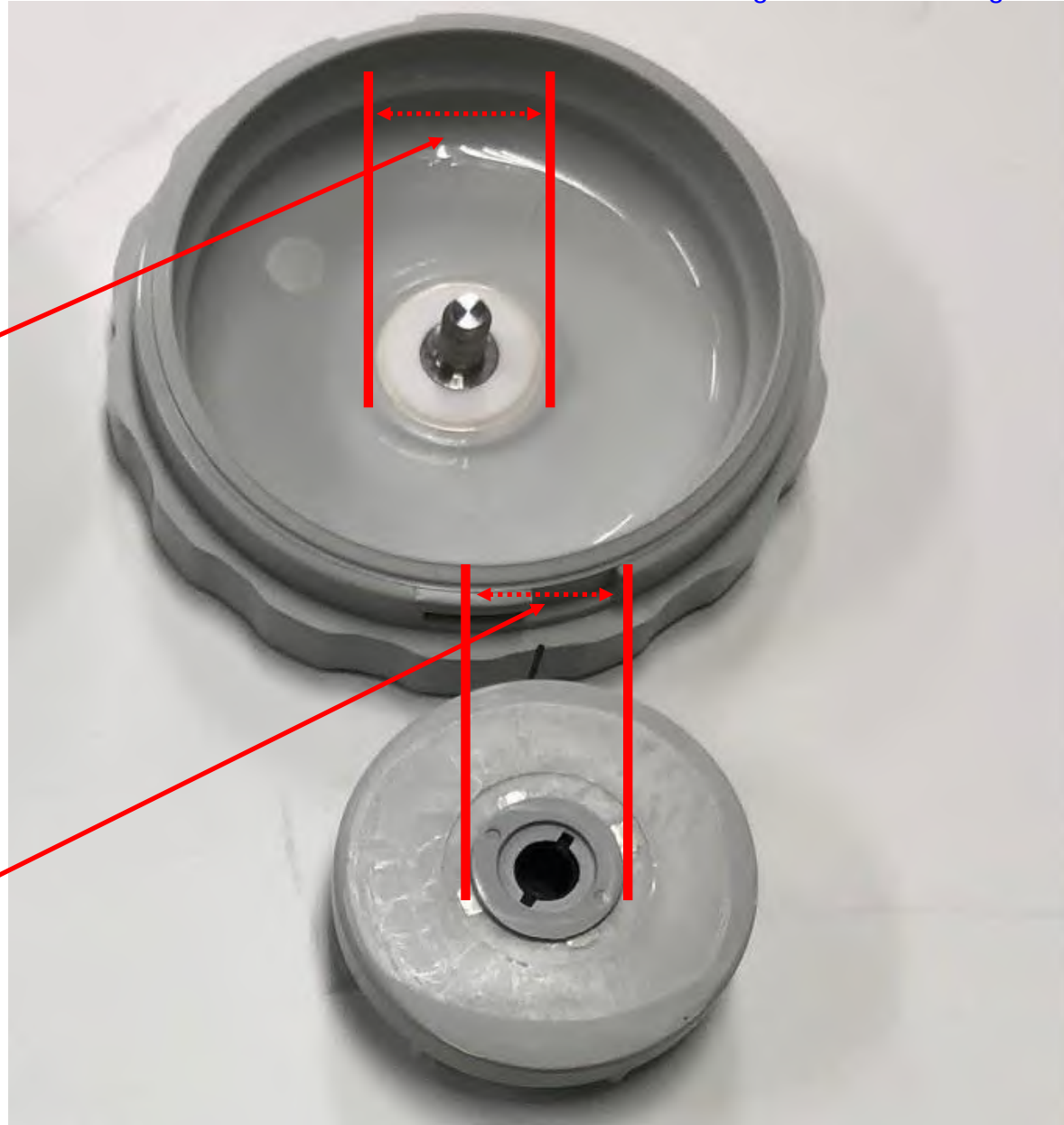
Liner

1. Engagement Member

1. Engagement Member




- 1. Outer diameter
of Shaft Protection
Member**
- 2. Outer diameter
of Outer Bearing
Member**



lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDL

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES




ELITE Pedicure Chair


MODEL CODE | SKU : 100079

SALE


\$2,495.00

MSRP: ~~\$3,495.00~~

From \$231/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: SANDSTONE

MODEL ELITE Pedicure Chair


QTY. - 1 +

Order a complete 5-piece package with a mat

lexor.com/products/elite-pedicure-spa-chair?variant=41052645097638

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** FREE SHIPPING For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS



53"/74" (Upright / Reclined) **31"/47"** (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (for massage system & seat positioning)
- 4-way Powered Chair Top
- Unbreakable Gel Bowl
- Discharge Pump System (optional)

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

FLOWRATE: 500 GPH At Floor Level

Power Source: 115VAC, 60Hz, 15A

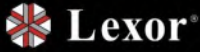
(Power needed per spa chair: 6 Amp)


*****LEXOR® CARE*****

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

→ ↻ 🏠 lexor.com/products/prime-lounge-pedicure-chair?variant=42869431533734

BUNDLE UP AND SAVE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOW




PRIVÉ Lounge Pedicure Chair


PROMOTION

\$4,495.00


MSRP: ~~\$6,000.00~~

From \$416/month with  **Credit Key**

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: *IVORY*



BASE COLOR: *BLACK MOONSTONE*

MODEL **PRIVÉ Lounge Pedicure Chair** ▾

QTY.

Order a complete 5-piece package with a matching n

lexor.com/products/prive-lounge-pedicure-chair?variant=42869431533734

UNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495** **FREE SHIPPING** For All Orders Over **\$5000** Financing Interest Rate As Low As **1%** With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (for easy access)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): 71
- HEIGHT (Upright/Reclined): 84
- WIDTH (Trays Closed/Open): 34/49
- Weight (lb.): 350
- Water Capacity (gal.): 4

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 60W
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 400 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
 (Power needed per spa chair: 9 Amp)

lexor.com/products/envision-pedicure-chair?variant=41769101852838

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2495**

FREE SHIPPING For All Orders Over **\$5000**

[PEDICURE CHAIRS](#)[PROMOTIONS](#)[SPECIAL FEATURES](#)[SALON FURNITURE](#)[PARTS & ACCESSORIES](#)[SHOWROOMS](#)

ENVISION Pedicure Chair

MODEL CODE | SKU : envision-cola-dark-walnut

SALE

\$2,495.00

MSRP: ~~\$3,900.00~~

From \$231/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: DARK WALNUT

MODEL ENVISION Pedicure Chair

QTY. - 1 +

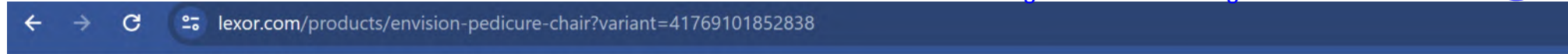
ADD TO CART

BUY IT NOW

APPLY FOR FINANCING

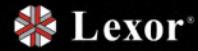
SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



FREE SHIPPING For All Orders Over \$5000

Financing Interest Rate As Low As 1% With Credit Key



PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

**SPECIFICATION**

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests *(for easy access)*
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

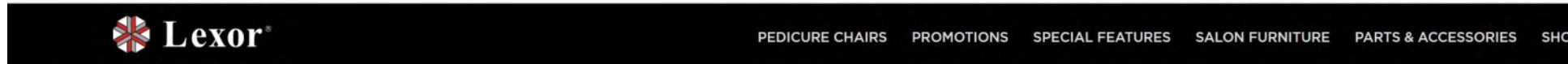
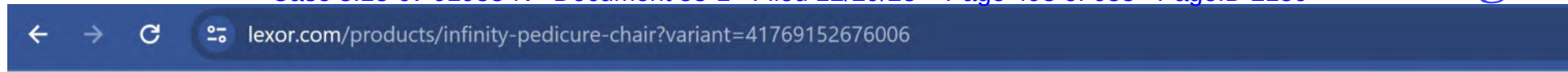
// DIMENSIONS *(in.)*

- LENGTH (Upright/Reclined): 53/74
- HEIGHT (Upright/Reclined): 56/52
- WIDTH (Trays Closed/Open): 31/47
- Weight *(lb.)*: 260
- Water Capacity *(gal.)*: 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining:
 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE



INFINITY Pedicure Chair

SALE

\$1,995.00

MSRP: ~~\$2,795.00~~

From \$185/month with Credit Key

BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL INFINITY Pedicure Chair

QTY. - 1 +

Order a complete 5-piece package with a matching

ADD TO CART

BUY IT NOW

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA

← → ↻ 🔍 lexor.com/products/infinity-pedicure-chair?variant=41769152676006

r \$5000 Financing Interest Rate As Low As 1% With Credit Key

Lexor® PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

SPECIFICATION

<p>// DESIGN</p> <ul style="list-style-type: none"> • AURORA® Color-changing LED Bowl • Elegant Burlwood & Chrome Accents • Foldable Manicure Trays with Cup/Phone Holders • Lift-up Arm-rests (<i>for easy access</i>) • Acetone-resistant ULTRALEATHER® Chair Top • Acetone-resistant Laminated Base & Gel Bowl • Durable Gel-coated Marble Composite Spa Base • Flushed-concept Handbag Hooks <p>// TECHNOLOGY</p> <ul style="list-style-type: none"> • ECOJET® Shaft-less® Universal Whirlpool Jet • AUTO-FILL™ Water Auto-Stop Sensor 	<p>// DIMENSIONS (in.)</p> <ul style="list-style-type: none"> • LENGTH (Upright/Reclined): 53/74 • HEIGHT (Upright/Reclined): 56/52 • WIDTH (Trays Closed/Open): 31/47 • Weight (lb.): 260 • Water Capacity (gal.): 4 <p>// ELECTRICAL</p> <p>Jet Motor: 120VAC at 85W 60Hz</p> <p>Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5</p> <p>Discharge Pump</p> <p>MOTOR: 120V AT 85W 60Hz</p> <p>MAX VERTICAL LIFT: 3 ft.</p> <p>FLOWRATE: 500 GPH At Floor Level</p> <p>Power Source: 115VAC, 60Hz, 15A</p> <p>(Power needed per spa chair: 6 Amp)</p>
--	---

lexor.com/products/liberte-pedicure-chair?variant=41768706244774

BUNDLE UP AND SAVE! Smart Pedi-Spa Starting At **\$1995** -&- Complete 5-piece Spa Package Starts At **\$2**

Lexor®

PEDICURE CHAIRS

PROMOTIONS

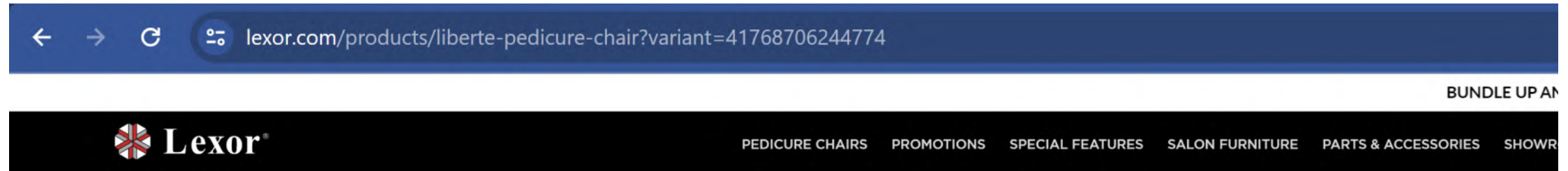
SPECIAL FEATURES

SALON FURNITURE

PARTS & ACCESSORIES

SHO

<



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (*in.*)

- LENGTH (**Upright**/Reclined): **53/74**
- HEIGHT (**Upright**/Reclined): **56/52**
- WIDTH (**Trays Closed**/Open): **31/47**
- **Weight** (*lb.*): **260**
- **Water Capacity** (*gal.*): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining
24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(*Power needed per spa chair: 6 Amp*)

LEXOR® CARE

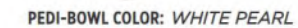


Lexor®

SHOW

MSRP: ~~\$3,900.00~~

BUY NOW, PAY LATER FOR BUSINESS



QTY.	-	1	+
------	---	---	---

BUY IT NOW

BUYER OUTSIDE OF NORTH AMERICA



g Interest Rate As Low As **1%** With Credit Key

Lexor®

PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHOWROOMS

L 53\"/74\" (Upright / Reclined)

W 31\"/47\" (Trays Closed / Opened)

SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System

// DIMENSIONS (in.)

- LENGTH (Upright/Reclined): **53/74**
- HEIGHT (Upright/Reclined): **56/52**
- WIDTH (Trays Closed/Open): **31/47**
- Weight (lb.): **260**
- Water Capacity (gal.): **4**

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz

Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5

Discharge Pump

MOTOR: 120V AT 85W 60Hz

MAX VERTICAL LIFT: 3 ft.

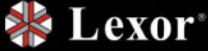
FLOWRATE: 500 GPH At Floor Level


Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

*****LEXOR® CARE*****

← → ↻ 📄 lexor.com/products/luminous-pedicure-chair?variant=41753030033574

BUNDLE

 PEDICURE CHAIRS PROMOTIONS SPECIAL FEATURES SALON FURNITURE PARTS & ACCESSORIES SHO





LUMINOUS Pedicure Chair

SALE


\$2,195.00

MSRP: ~~\$2,995.00~~

From \$203/month with  **Credit Key**
BUY NOW, PAY LATER FOR BUSINESS



CUSHION COLOR: COLA



BASE COLOR: ESPRESSO

MODEL

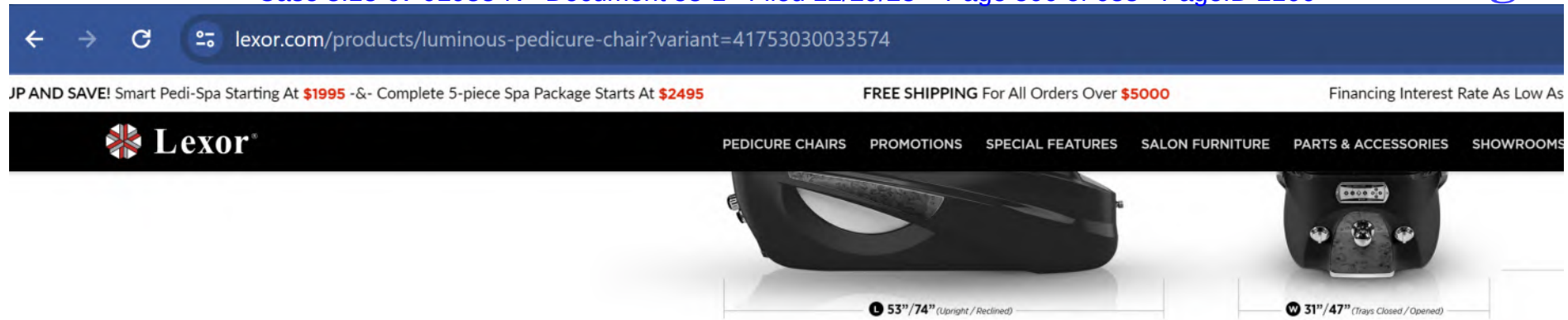
QTY.

Order a complete 5-piece package with a matching i

ADD TO CART **BUY IT NOW**

SEE PROMOS

BUYER OUTSIDE OF NORTH AMERICA



SPECIFICATION

// DESIGN

- AURORA® Color-changing LED Bowl
- Elegant Burlwood & Chrome Accents
- Foldable Manicure Trays with Cup/Phone Holders
- Lift-up Arm-rests (*for easy access*)
- Acetone-resistant ULTRALEATHER® Chair Top
- Acetone-resistant Laminated Base & Gel Bowl
- Durable Gel-coated Marble Composite Spa Base
- Flushed-concept Handbag Hooks

// TECHNOLOGY

- ECOJET® Shaft-less® Universal Whirlpool Jet
- AUTO-FILL™ Water Auto-Stop Sensor
- DCS Digital Control System
- Remote Control (*for massage system & seat positioning*)
- 4-way Powered Chair Top

// DIMENSIONS (*in.*)

- LENGTH (**Upright/Reclined**): 53/74
- HEIGHT (**Upright/Reclined**): 56/52
- WIDTH (**Trays Closed/Open**): 31/47
- Weight (*lb.*): 260
- Water Capacity (*gal.*): 4

// ELECTRICAL

Jet Motor: 120VAC at 85W 60Hz
Massage Motors, Seat Sliding & Reclining: 24VDC, 2.5A x 5
Discharge Pump
MOTOR: 120V AT 85W 60Hz
MAX VERTICAL LIFT: 3 ft.
FLOWRATE: 500 GPH At Floor Level
Power Source: 115VAC, 60Hz, 15A
(Power needed per spa chair: 6 Amp)

LEXOR® CARE

- 2-Year Limited Warranty*
- 24/7 Industry's Best Customer Service

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

LURACO HEALTH & BEAUTY, LLC.

Plaintiff

VS.

CHRISTOPHER LAC LUONG, SAM
NGUYEN,
LEXOR INC, LEXOR STORE, LLC, LEXOR
MANUFACTURING, LLC, PRO SPA DEPOT,
LLC, and ECOJET INC.

Defendants.

Case No. 3:22-CV-2602-N

**LEXOR MANUFACTURING LLC’S RESPONSES TO LURACO’S 1ST SET OF
DISCOVERY**

2. Defendant objects to each Request to the extent it seeks documents or information which is or contains trade secrets, confidential personal or business information, or other protected documents of Defendant and/or third-parties. Defendant will not produce any documents or information which contain trade secrets, confidential or proprietary information, or other protected information prior to the entry of an acceptable protective order.

3. Defendant objects to each Request to the extent it imposes obligations and burdens beyond those permitted by the Federal Rules of Civil Procedure and the Local Rules.

4. Defendant objects to each Request which contains no time frames or unduly long time frames to the extent that such requests require responses that would be unduly burdensome and irrelevant. Defendant will only provide responses within the time frame relevant to the issues in dispute.

5. Defendant objects to each Request to the extent that it is unduly burdensome, oppressive, vague, ambiguous, overly broad, or duplicative.

6. Defendant objects to each Request to the extent that it requests documents or information that are not relevant to this lawsuit nor reasonably calculated to lead to the discovery of admissible evidence.

7. Defendant objects to each Request to the extent it is a contention request which requests the impressions or opinions of counsel or experts.

8. Defendant objects to each Request to the extent a response requires documents not in the custody, possession, or control of Defendant.

9. Defendant objects to each Request to the extent it assumes facts not in evidence and lacks foundation.

10. By providing the responses below, Defendant does not waive, but rather preserves, all objections, including, but not limited to, all objections regarding jurisdiction, privilege, work-product, vagueness, relevancy, ambiguity, and undue burden.

11. Defendant objects to Defendant's definition of "You" as vague and ambiguous,

overbroad and unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, including because the terms “agents,” “representatives,” or “other persons” are undefined and subject to multiple interpretations. Defendant also objects to Plaintiff’s definition of “You” as overbroad and unduly burdensome to the extent it seeks information from Defendant which is not in the custody, control or possession of Defendant.

12. Defendant objects to Plaintiff’s definition of “communications” to the extent the term “any contact or attempted contact” is vague, ambiguous, overbroad and unduly burdensome.

13. Defendant objects to Plaintiff’s definition of “Accused Product” as overboard, unduly burdensome and not proportionate to the needs of the case. In responding, Defendants will interpret the term “Accused Products” to include the products specifically identified by Plaintiffs as constituting “Accused Products”— *i.e.*, the “Ecojet Magnetic Drive,”¹ the “Ecojet MD Wet End Set 3.0,” the “Ecojet MD Wet End Set 3.5.”²

14. Defendant objects to Plaintiff’s definition of “Luraco Products” as vague and ambiguous. Specifically, Plaintiff defines “Luraco Products” to include all products sold by Plaintiff which contain a Spa Pump.” However, Defendant can only speculate as to what products Plaintiff is currently selling. Further, matters concerning products sold by Plaintiff but not at issue in the parties’ lawsuits is not subject to discovery. In responding, Defendants will interpret the term “Luraco Products” to include only those products identified by Lexor Manufacturing, LLC as “Accused Products” in Lexor Manufacturing, LLC’s Complaint – *i.e.*, “Magna-JET,” “Dura-JET III,” “Dura-JET 4,” “Magna-JET with built-in LED Lights,” and “Dura-JET III with built in LED Lights.”³

¹ See First Amended Answer and Second Amended Counterclaims, Case No. Case No. 3:18-CV-01933, ¶ 69; Complaint, Case 3:22-cv-02604, Dkt. No. 1, ¶ 17.

² See Complaint, Case 3:22-cv-02602, Dkt. No. 1, ¶ 24.

³ See Complaint, Case 3:18-cv-01933, Dkt. No. 1, ¶ 9.

SPECIFIC OBJECTIONS AND RESPONSES

Subject to and without waiving any of the foregoing objections, Defendant provides the following specific objections and responses:

REQUEST FOR ADMISSION NO. 1:

Luong owns a membership interest in Lxor Mfg.

RESPONSE TO REQUEST FOR ADMISSION NO. 1:

Admit.

REQUEST FOR ADMISSION NO. 2:

Lxor Mfg. has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 2:

Admit.

REQUEST FOR ADMISSION NO. 3:

Lxor Mfg. sells Spa Pumps.

RESPONSE TO REQUEST FOR ADMISSION NO. 3:

Admit.

REQUEST FOR ADMISSION NO. 4:

Lxor Mfg. sells Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 4:

Admit.

REQUEST FOR ADMISSION NO. 5:

Lxor Mfg. sells Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 5:

Lxor Manufacturing LLC states that this request seeks information that is not subject to discovery, and therefore that no response is required.

LEXOR MANUFACTURING LLC'S DISCOVERY RESPONSES

REQUEST FOR ADMISSION NO. 6:

Nguyen owns a membership interest in Lexor Mfg.

RESPONSE TO REQUEST FOR ADMISSION NO. 6:

Denied.

REQUEST FOR ADMISSION NO. 7:

Nguyen has attempted to sell Accused Products manufactured by Lexor Mfg.

RESPONSE TO REQUEST FOR ADMISSION NO. 7:

Denied.

REQUEST FOR ADMISSION NO. 8:

Veganic Nails Spa has purchased Accused Products manufactured by Lexor Mfg.

RESPONSE TO REQUEST FOR ADMISSION NO. 8:

Lexor Manufacturing LLC states that this request seeks information that is not subject to discovery, and therefore that no response is required.

REQUEST FOR ADMISSION NO. 9:

Lexor Mfg. sells the “Ecojet MD Wet End Set 3.0, SKU: 601119.”

RESPONSE TO REQUEST FOR ADMISSION NO. 9:

Admit.

REQUEST FOR ADMISSION NO. 10:

Lexor Mfg. sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 10:

Admit.

REQUEST FOR ADMISSION NO. 11:

Lexor Mfg. sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 11:

Admit.

REQUEST FOR ADMISSION NO. 12:

LEXOR MANUFACTURING LLC’S DISCOVERY RESPONSES

Lexor Mfg. sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 12:

Admit.

REQUEST FOR ADMISSION NO. 13:

Lexor Mfg. sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 13:

Admit.

REQUEST FOR ADMISSION NO. 14:

Lexor Mfg. sells the “Universal Magnetic Wet-End.”

RESPONSE TO REQUEST FOR ADMISSION NO. 14:

Admit.

REQUEST FOR ADMISSION NO. 15:

Lexor Mfg. sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 15:

Admit.

REQUEST FOR ADMISSION NO. 16:

Lexor Mfg. sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 16:

Admit.

REQUEST FOR ADMISSION NO. 17:

Lexor Mfg. has made no effort to design around U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR ADMISSION NO. 17:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous.

REQUEST FOR ADMISSION NO. 18:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,215,178.

LEXOR MANUFACTURING LLC’S DISCOVERY RESPONSES

RESPONSE TO REQUEST FOR ADMISSION NO. 18:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 19:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR ADMISSION NO. 19:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 20:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 20:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 21:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR ADMISSION NO. 21:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 22:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR ADMISSION NO. 22:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 23:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 23:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 24:

Lexor Mfg. has not stopped manufacturing and selling the Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 24:

Admit.

REQUEST FOR ADMISSION NO. 25:

Lexor Mfg. has sold the Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 25:

Admit.

REQUESTS FOR PRODUCTION

REQUEST FOR PRODUCTION NO. 1:

All Communications between Luraco and Lexor Mfg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 1:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the grounds that it seeks the production of information that is equally available to the Plaintiff. Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

LEXOR MANUFACTURING LLC’S DISCOVERY RESPONSES

REQUEST FOR PRODUCTION NO. 2:

All Communications that mention Luraco.

RESPONSE TO REQUEST FOR PRODUCTION NO. 2:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 3:

All Communications that mention Tom Le.

RESPONSE TO REQUEST FOR PRODUCTION NO. 3:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 4:

All Communications that mention Kevin Le.

RESPONSE TO REQUEST FOR PRODUCTION NO. 4:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this

LEXOR MANUFACTURING LLC'S DISCOVERY RESPONSES

Page 9 of 25

request on the ground that it the information is seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 5:

All Communications that mention U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR PRODUCTION NO. 5:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 6:

All Communications that mention U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR PRODUCTION NO. 6:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 7:

All Communications that mention U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR PRODUCTION NO. 7:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 8:

LEXOR MANUFACTURING LLC'S DISCOVERY RESPONSES

All Communications that mention U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR PRODUCTION NO. 8:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 9:

All Communications that mention U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR PRODUCTION NO. 9:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 10:

All Communications that mention U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR PRODUCTION NO. 10:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 11:

All Communications that mention U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR PRODUCTION NO. 11:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Lexor Manufacturing LLC

states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 12:

All Communications mentioning Luraco or any known agent of Luraco, including but not limited to any employee, contractor, or distributor.

RESPONSE TO REQUEST FOR PRODUCTION NO. 12:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 13:

All Communications and Documents discussing Luraco Products including but not limited to all demand letters sent to Luraco's dealers and distributors.

RESPONSE TO REQUEST FOR PRODUCTION NO. 13:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 14:

All records showing the sales earned by Lexor Mfg. for sale of the Accused Products, separately by company, showroom, dealer, and model number.

RESPONSE TO REQUEST FOR PRODUCTION NO. 14:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 15:

All business and financial records showing sales by Lexor Mfg. of Spa Pumps and Spa Tubs, including inquiries about products from customers, purchase orders, purchase acknowledgments, shipping Documentation, invoices, and receipts.

RESPONSE TO REQUEST FOR PRODUCTION NO. 15:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 16:

All Documents relating to the importation of any Spa Pumps and Spa Tubs sold by Lexor Mfg. ("Imported Products") to which Luong has access, including but not limited to all requests for quotes for purchase and purchase orders for the Imported Products, quotes from potential vendors and purchase orders for components of Spa Pumps and Spa Tubs, including also all contracts, purchase order acknowledgements, terms and conditions of such sales and purchases,

LEXOR MANUFACTURING LLC'S DISCOVERY RESPONSES

Page 13 of 25

invoices, bills of lading, and customs declarations. Produce all Documents related to the Pro Spa Depot's relationships with any suppliers or manufacturers of the imported products as Described in the previous RFP, including any contracts, purchase orders, or Correspondence.

RESPONSE TO REQUEST FOR PRODUCTION NO. 16:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 17:

All Documents related to the Lexor Mfg.'s relationships with any suppliers or manufacturers of the imported products as Described in the previous RFP, including any contracts, purchase orders, or Correspondence.

RESPONSE TO REQUEST FOR PRODUCTION NO. 17:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 18:

Produce the governing Documents of all businesses in which Lexor Inc, has any ownership interest or in which Lexor Mfg. serves as a partner, manager, or director, including but not limited to their certificate of formation, operating agreements, merger agreements, partnership agreements, and records of share transfers.

RESPONSE TO REQUEST FOR PRODUCTION NO. 18:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 19:

Produce the governing Documents of Lexor Mfg., including but not limited to its certificate of formation, operating agreements, merger agreements, partnership agreements, and records of share transfers.

RESPONSE TO REQUEST FOR PRODUCTION NO. 19:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 20:

All sales Documents showing all Spa Pump and Spa Tub models, part numbers, and catalogs displaying those parts sold by or through Lexor Mfg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 20:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 21:

All Documents concerning meeting minutes, notes, and Communications related to all meetings, whether in person and telephonic, held by Lexor Mfg.'s board of directors, officers, shareholders, distributors, employees, and investors concerning the Accused Products.

RESPONSE TO REQUEST FOR PRODUCTION NO. 21:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 22:

All Documents sufficient to identify the hierarchy of Lexor Mfg.'s employees, including the identity of any employee involved in the marketing, sales, design, engineering, manufacturing, research, development, importation, exportation, and commercialization of Spa Pumps and Spa Tubs, including but not limited to the reporting relationships of officers, directors, managers, research scientists, engineers, designers, employees, and agents whose duties or responsibilities relate in any way to Spa Pumps and Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 22:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 23:

All Documents concerning revenue generated, anticipated revenue, and sales projections for Spa Pumps and Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 23:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

Subject to and without waiving these objections, LEXOR Manufacturing LLC states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 24:

All Documents sufficient to show your organizational structure and corporate structure, including parent corporations, subsidiaries, and affiliates.

RESPONSE TO REQUEST FOR PRODUCTION NO. 24:

LEXOR Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. LEXOR Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, LEXOR Manufacturing LLC states that it will produce documents reflecting the organizational structure of LEXOR Manufacturing LLC to the extent that such documents can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 25:

All Documents sufficient to show any licenses, cross-licenses, and agreements concerning parts or equipment, including but not limited to the Ecojet Magnetic Drive.

RESPONSE TO REQUEST FOR PRODUCTION NO. 25:

LEXOR Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. LEXOR Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. LEXOR Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 26:

All Documents related to the development, manufacture, sale, and marketing of Spa Pumps and Spa Tubs, including but not limited to product specifications, marketing materials, and sales data.

RESPONSE TO REQUEST FOR PRODUCTION NO. 26:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 27:

All Documents related to any licenses or agreements between the Parties or with third parties, including but not limited to any licenses or agreements related to Spa Pumps and Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 27:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 28:

All Documents related to the financial performance of Spa Pumps and Spa Tubs including but not limited to sales data, revenue, and profit and loss statements.

RESPONSE TO REQUEST FOR PRODUCTION NO. 28:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Lexor Manufacturing LLC states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 29:

All Documents related to any testing or analysis performed on Spa Pumps and Spa Tubs, including but not limited to any testing or analysis related to infringement or validity of the allegedly infringed patent.

RESPONSE TO REQUEST FOR PRODUCTION NO. 29:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 30:

All corporate governing Documents of the businesses that you mention in your response to Interrogatory No. 2, to the extent not already produced.

RESPONSE TO REQUEST FOR PRODUCTION NO. 30:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 31:

All Documents related to the design and development of Spa Pumps and Spa Tubs, including but not limited to design specifications, CAD files, schematics, drawings, engineering notes, including any files used to create molds, tooling, or other manufacturing components and Correspondence between designers, engineers, and other personnel involved in the design process.

RESPONSE TO REQUEST FOR PRODUCTION NO. 31:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it

seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 32:

All Documents related to the bill of materials for all Spa Pumps and Spa Tubs sold by Lexor Mfg., including but not limited to spreadsheets, databases, or other records used to manage or track the components used by Lexor Mfg. to manufacture Spa Pumps and Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 32:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 33:

All purchase orders, invoices, and receipts related to the acquisition of components used in the manufacture of Spa Pumps and Spa Tubs, and Correspondence with suppliers or manufacturers.

RESPONSE TO REQUEST FOR PRODUCTION NO. 33:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 34:

All Documents sufficient to identify articles, advertising and marketing of Spa Pumps and Spa Tubs including those concerning market approval, benefits, advantages, and superiority of Spa Pumps and Spa Tubs and features thereof.

RESPONSE TO REQUEST FOR PRODUCTION NO. 34:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 35:

All Document sufficient to identify test studies, or test markets, and the results, reactions, and industry knowledge gained in the test studies, or test markets where any Person viewed, analyzed, tried, purchased or tested water jet pumps.

RESPONSE TO REQUEST FOR PRODUCTION NO. 35:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 36:

Produce one specimen of all models and versions of Spa Pumps designed, manufactured, or sold by Lexor Inc. (Note: Luraco will cooperate with Lexor, Inc. and the other Defendants to eliminate redundant specimen production and will pay for such items.)

RESPONSE TO REQUEST FOR PRODUCTION NO. 36:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without wavier of the forgoing, Lexor Manufacturing, LLC states that its products are available for sale publically.

INTERROGATORIES

INTERROGATORY NO. 1:

List all Persons contacted to provide information used in replying to this set of discovery requests, along with their phone number, email address, and physical address, and all forms and variations of the Persons' names and addresses used in the last ten years to the extent known, e.g., Sam Nguyen is known to use other names than "Sam" and Christopher Luong has used the spelling Christopher Long in the past, and also known to have used a different first name from Christopher.

RESPONSE TO INTERROGATORY NO. 1:

Lexor Manufacturing LLC identifies Chris Luong, who can be contacted through counsel of record.

INTERROGATORY NO. 2:

Describe all Persons which have held an ownership interest of Lexor Mfg., or has been affiliated as a subsidiary, affiliate, partner, or in a joint venture, since January 1, 2018. In your description, identify:

- (a) The legal name, address and telephone number of all relevant Persons;
- (b) The state of incorporation or organization;
- (c) The company's business purpose or line of business; and
- (d) The name and titles of company's officers or directors.

RESPONSE TO INTERROGATORY NO. 2:

Lexor Manufacturing LLC identifies Chris Luong, who can be contacted through counsel of record.

INTERROGATORY NO. 3:

Describe all Accused Products, Spa Tubs, and Spa Pumps that Lexor Mfg. has sold or used in all businesses in which it has or had an ownership interest or manages for others, including the part number and business which sells the product, since January 1, 2018. In your

answer, Describe whether the reported Accused Products, Spa Tubs, and Spa Pumps were manufactured by the business, or just purchased and resold by that business.

RESPONSE TO INTERROGATORY NO. 3:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

INTERROGATORY NO. 4:

Identify all individuals involved in the conception, design, development, manufacture, and testing of the Accused Products, Spa Tubs, and Spa Pumps at Lexor Mfg., and state their job titles and responsibilities.

RESPONSE TO INTERROGATORY NO. 4:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

INTERROGATORY NO. 5:

Identify all individuals involved in the sale, marketing, or distribution of the Accused Products, Spa Tubs, and Spa Pumps sold by any business named in response to Interrogatory 2 and state their job titles and responsibilities.

RESPONSE TO INTERROGATORY NO. 5:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

INTERROGATORY NO. 6:

LEXOR MANUFACTURING LLC'S DISCOVERY RESPONSES

Identify all Persons, entities, or organization to whom Luxor Mfg. has sold the Spa Pumps and Spa Tubs to from April 1, 2014, to present. In your response, include:

- (a) The name and address of the Person, entity, or organization;
- (b) The dates on which the Spa Pumps and Spa Tubs where sold, transferred, or otherwise provided;
- (c) The quantity of Spa Pumps and Spa Tubs sold, transferred, or otherwise provided; and
- (d) The price paid for the Spa Pumps and Spa Tubs.

RESPONSE TO INTERROGATORY NO. 6:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

INTERROGATORY NO. 7:

For each Person, entity, or organization identified in response to Interrogatory No. 6, provide a copy of any invoices, receipts, or other Documentation related to the sale, transfer, or provisions of Spa Pumps and Spa Tubs in the years 2020 to present.

RESPONSE TO INTERROGATORY NO. 7:

Lexor Manufacturing LLC objects to this request to the extent it seeks the production of privileged material. Lexor Manufacturing LLC also objects to this request on the ground that it seeks information that is not subject to discovery. Lexor Manufacturing LLC also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

Respectfully Submitted,

By: /s/ Andy Nikolopoulos
Andy Nikolopoulos

State Bar No. 24044852
FOX ROTHSCHILD LLP
Saint Ann Court
2501 N. Harwood St., Suite 1800
Dallas, TX 75240
Tel: 972/991-0889
Fax: 972/404-0516
Email: anikolopoulos@foxrothschild.com

Jeff Grant
FOX ROTHSCHILD LLP
10250 Constellation Blvd., Suite 900
Los Angeles, CA 90067
Tel: 310/228-4483
Fax: 310/556-9828
Email: jgrant@foxrothschild.com
Attorneys for Defendants

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

LURACO HEALTH & BEAUTY, LLC.

Plaintiff

Case No. 3:22-CV-2602-N

VS.

CHRISTOPHER LAC LUONG, SAM
NGUYEN,
LEXOR INC, LEXOR STORE, LLC, LEXOR
MANUFACTURING, LLC, PRO SPA DEPOT,
LLC, and ECOJET INC.

Defendants.

CHRISTOPHER LUONG'S RESPONSES TO LURACO'S 1ST SET OF DISCOVERY

Defendant, Christopher Luong (sometimes, “Defendant”) hereby responds and objects to the First Set of Discovery of Plaintiff, Luraco Health & Beauty, LLC (“Plaintiff”) as follows:

PREAMBLE

Luraco sued the wrong parties. Luraco improperly sued Texas that entities never conducted any business (but are subject to venue in the Northern Texas for infringement actions under 28 U.S.C. § 1400) not the identically named actual operating entities, which are organized and headquartered in California (and not subject to venue). Consequently, while the Defendants do not challenge the venue for the filing of this action, most of the Defendants had no involvement in any of the allegations set forth in the Complaint. The Complaint asserts claims against entities that conducted no business whatsoever and certainly never manufactured, distributed or sold the Accused Products.

The Complaint asserts claims against the following entities organized under the laws of

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

Page 1 of 55

the State of Texas:

Lexor, Inc., a Texas corporation

Lexor Store, LLC, Texas LLC

Pro Spa Depot, LLC, a Texas LLC

Ecojet, Inc., a Texas corporation

These four entities will be hereinafter referred to as the “Texas Entities.” The Texas Entities were incorporated relatively recently but were never operational. The Texas Entities were part of a potential project to move operations from California to Texas that has subsequently been abandoned. Luraco also sued two individuals, Christopher Lac Luong and Sam Nguyen, as directors of one of the Texas Entities, Lexor, Inc. Luong, Nguyen and the Texas Entities will be hereinafter referred to as the “Wrongfully Named Defendants.”

None of the Wrongfully Named Defendants engaged in any of the activity alleged in the Complaint. To the contrary, entities sharing the same name – i.e., “Lexor, Inc.,” “Lexor Store, LLC,” “Pro Spa Depot, LLC” and “Ecojet, Inc.” – were organized under the laws of the State of California and were at least tangentially involved in the manufacturing, distribution and/or sales of the Accused Products. These defendants are headquartered in California. These California entities were not, however, named as defendants in the lawsuit. Indeed, Texas is an improper venue for patent infringement actions against the correct defendants. 28 U.S.C. § 1400.

GENERAL OBJECTIONS

1. Defendant objects to each Request to the extent it seeks documents or information protected from discovery by the attorney-client privilege, the attorney work-product doctrine, and/or any other applicable statutory or common law privilege or protection. Nothing contained in these objections or responses is intended as, or shall in any way be deemed, a waiver of any attorney-client privilege, any work-product protection, or any other applicable privilege or doctrine. Any inadvertent production or disclosure of information will not be deemed a waiver of any privilege with respect to the information produced.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Page 2 of 55

2. Defendant objects to each Request to the extent it seeks documents or information which is or contains trade secrets, confidential personal or business information, or other protected documents of Defendant and/or third-parties. Defendant will not produce any documents or information which contain trade secrets, confidential or proprietary information, or other protected information prior to the entry of an acceptable protective order.

3. Defendant objects to each Request to the extent it imposes obligations and burdens beyond those permitted by the Federal Rules of Civil Procedure and the Local Rules.

4. Defendant objects to each Request which contains no time frames or unduly long time frames to the extent that such requests require responses that would be unduly burdensome and irrelevant. Defendant will only provide responses within the time frame relevant to the issues in dispute.

5. Defendant objects to each Request to the extent that it is unduly burdensome, oppressive, vague, ambiguous, overly broad, or duplicative.

6. Defendant objects to each Request to the extent that it requests documents or information that are not relevant to this lawsuit nor reasonably calculated to lead to the discovery of admissible evidence.

7. Defendant objects to each Request to the extent it is a contention request which requests the impressions or opinions of counsel or experts.

8. Defendant objects to each Request to the extent a response requires documents not in the custody, possession, or control of Defendant.

9. Defendant objects to each Request to the extent it assumes facts not in evidence and lacks foundation.

10. By providing the responses below, Defendant does not waive, but rather preserves, all objections, including, but not limited to, all objections regarding jurisdiction, privilege, work-product, vagueness, relevancy, ambiguity, and undue burden.

11. Defendant objects to Defendant's definition of "You" as vague and ambiguous,

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

Page 3 of 55

overbroad and unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, including because the terms “agents,” “representatives,” or “other persons” are undefined and subject to multiple interpretations. Defendant also objects to Plaintiff’s definition of “You” as vague, ambiguous, overly broad, and not reasonably calculated to lead to the discovery of admissible evidence to the extent it includes an additional vague term such as “Does 1-10” as part of the definition. Defendant also objects to Plaintiff’s definition of “You” as overbroad and unduly burdensome to the extent it seeks information from Defendant which is not in the custody, control or possession of Defendant.

12. Defendant objects to Plaintiff’s definition of “communications” to the extent the term “any contact or attempted contact” is vague, ambiguous, overbroad and unduly burdensome.

13. Defendant objects to Plaintiff’s definition of “Accused Product” as overboard, unduly burdensome and not proportionate to the needs of the case. In responding, Defendants will interpret the term “Accused Products” to include the products specifically identified by Plaintiffs as constituting “Accused Products”— *i.e.*, the “Ecojet Magnetic Drive,”¹ the “Ecojet MD Wet End Set 3.0,” the “Ecojet MD Wet End Set 3.5.”²

14. Defendant objects to Plaintiff’s definition of “Luraco Products” as vague and ambiguous. Specifically, Plaintiff defines “Luraco Products” to include all products sold by Plaintiff which contain a Spa Pump.” However, Defendant can only speculate as to what products Plaintiff is currently selling. Further, matters concerning products sold by Plaintiff but not at issue in the parties’ lawsuits is not subject to discovery. In responding, Defendants will interpret the term “Luraco Products” to include only those products identified by Lexor Manufacturing, LLC as “Accused Products” in Lexor Manufacturing, LLC’s Complaint – *i.e.*,

¹ See First Amended Answer and Second Amended Counterclaims, Case No. Case No. 3:18-CV-01933, ¶ 69; Complaint, Case 3:22-cv-02604, Dkt. No. 1, ¶ 17.

² See Complaint, Case 3:22-cv-02602, Dkt. No. 1, ¶ 24.

"Magna-JET," "Dura-JET III," "Dura-JET 4," "Magna-JET with built-in LED Lights," and "Dura-JET III with built in LED Lights."³

SPECIFIC OBJECTIONS AND RESPONSES

Subject to and without waiving any of the foregoing objections, Defendant provides the following specific objections and responses:

REQUEST FOR ADMISSION NO. 1:

Luong was a member of a Texas LLC registered as “Lexor Store, LLC” from 2012 until 2022.

RESPONSE TO REQUEST FOR ADMISSION NO. 1:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case. Subject to and without waiver of the foregoing, Christopher Luong states that he was a member of Lexor Store, LLC in 2022.

REQUEST FOR ADMISSION NO. 2:

Luong is a member of an Oregon LLC registered as “Lexor Store, LLC” in 2017.

RESPONSE TO REQUEST FOR ADMISSION NO. 2:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 3:

Luong owns a store in Oregon operating under the name “Nailtek Salon”.

RESPONSE TO REQUEST FOR ADMISSION NO. 3:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

³ See Complaint, Case 3:18-cv-01933, Dkt. No. 1, ¶ 9.

REQUEST FOR ADMISSION NO. 4:

Luong is a member of a Florida LLC registered as “Lexus Store, LLC” in 2012.

RESPONSE TO REQUEST FOR ADMISSION NO. 4:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 5:

Luong is a manager of a Florida LLC registered as “Lexus Store, LLC.”

RESPONSE TO REQUEST FOR ADMISSION NO. 5:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 6:

Luong has ownership interest in an Illinois LLC registered as “Lexus Store, LLC.”

RESPONSE TO REQUEST FOR ADMISSION NO. 6:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 7:

Luong is a member of a California LLC registered as “Lexus Store, LLC”.

RESPONSE TO REQUEST FOR ADMISSION NO. 7:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 8:

Luong is a member of a Georgia LLC registered as “Lexus Store, LLC”.

RESPONSE TO REQUEST FOR ADMISSION NO. 8:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 9:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Luong is a member of a Virginia LLC registered as “Lexus Store, LLC”.

RESPONSE TO REQUEST FOR ADMISSION NO. 9:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 10:

Luong has operated a company known as “Lexus Store” in Massachusetts.

RESPONSE TO REQUEST FOR ADMISSION NO. 10:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 11:

Luong owns a store in Oregon using the assumed name “Rose City Nails Supply”.

RESPONSE TO REQUEST FOR ADMISSION NO. 11:

Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 12:

Luong has an ownership in a Texas corporation known as Lexus, Inc. from March 30, 2020 until the corporation forfeited its charter on June 24, 2022.

RESPONSE TO REQUEST FOR ADMISSION NO. 12:

Admit.

REQUEST FOR ADMISSION NO. 13:

Luong owns a membership interest in Pro Spa Depot, LLC.

RESPONSE TO REQUEST FOR ADMISSION NO. 13:

Admit

REQUEST FOR ADMISSION NO. 14:

Luong owns a membership interest in Lexus Mfg.

RESPONSE TO REQUEST FOR ADMISSION NO. 14:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Admit.

REQUEST FOR ADMISSION NO. 15:

Luong has an ownership in Ecojet, Inc.

RESPONSE TO REQUEST FOR ADMISSION NO. 15:

Admit.

REQUEST FOR ADMISSION NO. 16:

Luong has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 16:

Admit.

REQUEST FOR ADMISSION NO. 17:

Luong has attempted to sell Accused Products while doing business under assumed names since January 2019.

RESPONSE TO REQUEST FOR ADMISSION NO. 17:

Christopher Luong objects to this request on the grounds that “assumed names” is vague and ambiguous. Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 18:

Luong has attempted to use Accused Products in businesses that he has operated while doing business under assumed names since January 2019.

RESPONSE TO REQUEST FOR ADMISSION NO. 18:

Christopher Luong objects to this request on the grounds that “assumed names” and “attempted to use” are vague and ambiguous. Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 19:

Luong has attempted to sell Accused Products through businesses in which he has ownership interests, either as a member of a limited liability company, a shareholder of a corporation, or a partner in a partnership, or through a venture agreement.

RESPONSE TO REQUEST FOR ADMISSION NO. 19:

Christopher Luong objects to this request on the grounds that “attempted sell Accused Products through” is vague and ambiguous. Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 20:

Christopher Luong has sold Accused Products to Veganic Nails Spa through a Lexor Company.

RESPONSE TO REQUEST FOR ADMISSION NO. 20:

Christopher Luong objects to this request on the grounds that “sold Accused Products . . . through” is vague and ambiguous. Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

SAM NGUYEN

REQUEST FOR ADMISSION NO. 21:

Nguyen owns a membership interest in Lexor Store, LLC.

RESPONSE TO REQUEST FOR ADMISSION NO. 21:

Denied.

REQUEST FOR ADMISSION NO. 22:

Nguyen owns a membership interest in Lexor, Inc.

RESPONSE TO REQUEST FOR ADMISSION NO. 22:

Denied.

REQUEST FOR ADMISSION NO. 23:

Nguyen owns a membership interest in Pro Spa Depot, LLC.

RESPONSE TO REQUEST FOR ADMISSION NO. 23:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Denied.

REQUEST FOR ADMISSION NO. 24:

Nguyen owns a membership interest in Lexor Mfg.

RESPONSE TO REQUEST FOR ADMISSION NO. 24:

Denied.

REQUEST FOR ADMISSION NO. 25:

Nguyen owns a membership interest in Ecojet, Inc.

RESPONSE TO REQUEST FOR ADMISSION NO. 25:

Denied.

REQUEST FOR ADMISSION NO. 26:

Nguyen has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 26:

Admit.

REQUEST FOR ADMISSION NO. 27:

Nguyen has attempted to sell Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 27:

Christopher Luong objects to this request on the grounds that “attempted to sell” is vague and ambiguous. Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 28:

Nguyen has sold Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 28:

Denied.

REQUEST FOR ADMISSION NO. 29:

Nguyen has signed Documents which show the sale of Accused Products.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

RESPONSE TO REQUEST FOR ADMISSION NO. 29:

Christopher Luong objects to this request on the grounds that “signed Documents which show the sale” is vague and ambiguous. Christopher Luong objects to this request on the grounds that it seeks information that is beyond the scope of discovery.

LEXOR, INC.

REQUEST FOR ADMISSION NO. 30:

Lexor, Inc. manufactures the “Ecojet MD Wet End Set 3.0, SKU: 601119.”

RESPONSE TO REQUEST FOR ADMISSION NO. 30:

Denied.

REQUEST FOR ADMISSION NO. 31:

Lexor, Inc. manufactures the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 31:

Denied.

REQUEST FOR ADMISSION NO. 32:

Lexor, Inc. manufactures the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 32:

Denied.

REQUEST FOR ADMISSION NO. 33:

Lexor, Inc. manufactures the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 33:

Denied.

REQUEST FOR ADMISSION NO. 34:

Lexor, Inc. manufactures the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 34:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Denied.

REQUEST FOR ADMISSION NO. 35:

Lexor, Inc. manufactures the “Universal Magnetic Wet-End.”

RESPONSE TO REQUEST FOR ADMISSION NO. 35:

Denied.

REQUEST FOR ADMISSION NO. 36:

Lexor, Inc. manufactures the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 36:

Denied.

REQUEST FOR ADMISSION NO. 37:

Lexor, Inc. manufactures the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 37:

Denied.

REQUEST FOR ADMISSION NO. 38:

Lexor, Inc. sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 38:

Denied.

REQUEST FOR ADMISSION NO. 39:

Lexor, Inc. sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 39:

Denied.

REQUEST FOR ADMISSION NO. 40:

Lexor, Inc. sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 40:

Denied.

REQUEST FOR ADMISSION NO. 41:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Lexor, Inc. sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 41:

Denied.

REQUEST FOR ADMISSION NO. 42:

Lexor, Inc. sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 42:

Denied.

REQUEST FOR ADMISSION NO. 43:

Lexor, Inc. sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 43:

Denied.

REQUEST FOR ADMISSION NO. 44:

Lexor, Inc. has made no effort to design around U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR ADMISSION NO. 44:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 45:

Lexor, Inc. has made no effort to design around U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR ADMISSION NO. 45:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 46:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Lexor, Inc. has made no effort to design around U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR ADMISSION NO. 46:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 47:

Lexor, Inc. has made no effort to design around U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 47:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 48:

Lexor, Inc. has made no effort to design around U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR ADMISSION NO. 48:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 49:

Lexor, Inc. has made no effort to design around U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR ADMISSION NO. 49:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or

sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 50:

Lexor, Inc. has made no effort to design around U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 50:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 51:

Lexor, Inc. sells motors used in pedicure spas.

RESPONSE TO REQUEST FOR ADMISSION NO. 51:

Denied.

REQUEST FOR ADMISSION NO. 52:

Lexor, Inc. sells pedicure spa motors.

RESPONSE TO REQUEST FOR ADMISSION NO. 52:

Denied.

REQUEST FOR ADMISSION NO. 53:

Lexor, Inc. has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 53:

Admit.

REQUEST FOR ADMISSION NO. 54:

Lexor has attempted to sell the Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 54:

Denied.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

REQUEST FOR ADMISSION NO. 55:

Lexor Inc. has sold Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 55:

Denied.

LEXOR MANUFACTURING

REQUEST FOR ADMISSION NO. 56:

Lexor Mfg. manufactures the “Ecojet MD Wet End Set 3.0, SKU: 601119.”

RESPONSE TO REQUEST FOR ADMISSION NO. 56:

Admit.

REQUEST FOR ADMISSION NO. 57:

Lexor Mfg. manufactures the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 57:

Admit.

REQUEST FOR ADMISSION NO. 58:

Lexor Mfg. manufactures the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 58:

Admit.

REQUEST FOR ADMISSION NO. 59:

Lexor Mfg. manufactures the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 59:

Admit.

REQUEST FOR ADMISSION NO. 60:

Lexor Mfg. manufactures the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 60:

Admit.

REQUEST FOR ADMISSION NO. 61:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Lexor Mfg. manufactures the “Universal Magnetic Wet-End.”

RESPONSE TO REQUEST FOR ADMISSION NO. 61:

Admit.

REQUEST FOR ADMISSION NO. 62:

Lexor Mfg. manufactures the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 62:

Admit.

REQUEST FOR ADMISSION NO. 63:

Lexor Mfg. manufactures the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 63:

Admit.

REQUEST FOR ADMISSION NO. 64:

Lexor Mfg. sells the “Ecojet MD Wet End Set 3.0, SKU: 601119.”

RESPONSE TO REQUEST FOR ADMISSION NO. 64:

Admit.

REQUEST FOR ADMISSION NO. 65:

Lexor Mfg. sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 65:

Admit.

REQUEST FOR ADMISSION NO. 66:

Lexor Mfg. sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 66:

Admit.

REQUEST FOR ADMISSION NO. 67:

Lexor Mfg. sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 67:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Admit.

REQUEST FOR ADMISSION NO. 68:

Lexor Mfg. sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 68:

Admit.

REQUEST FOR ADMISSION NO. 69:

Lexor Mfg. sells the “Universal Magnetic Wet-End.”

RESPONSE TO REQUEST FOR ADMISSION NO. 69:

Admit.

REQUEST FOR ADMISSION NO. 70:

Lexor Mfg. sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 70:

Admit.

REQUEST FOR ADMISSION NO. 71:

Lexor Mfg. sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 71:

Admit.

REQUEST FOR ADMISSION NO. 72:

Lexor Mfg. has made no effort to design around U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR ADMISSION NO. 72:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 73:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR ADMISSION NO. 73:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 74:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR ADMISSION NO. 74:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 75:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 75:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 76:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR ADMISSION NO. 76:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 77:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR ADMISSION NO. 77:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 78:

Lexor Mfg. has made no effort to design around U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 78:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 79:

Lexor Mfg. has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 79:

Lexor Manufacturing LLC objects to this request on the grounds that “design around” is vague and ambiguous. Lexor Manufacturing LLC further states that this request seeks information that is beyond the scope of discovery.

REQUEST FOR ADMISSION NO. 80:

Lexor Mfg. has attempted to sell Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 80:

Admit.

REQUEST FOR ADMISSION NO. 81:

Lexor Mfg. has not stopped manufacturing and selling Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 81:

Admit.

REQUEST FOR ADMISSION NO. 82:

Lexor Mfg. has sold Accused Products to Veganic Nails Spa.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

RESPONSE TO REQUEST FOR ADMISSION NO. 82:

Admit.

ECOJET

REQUEST FOR ADMISSION NO. 83:

Ecojet manufactures the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 83:

Denied.

REQUEST FOR ADMISSION NO. 84:

Ecojet manufactures the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 84:

Denied.

REQUEST FOR ADMISSION NO. 85:

Ecojet manufactures the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 85:

Denied.

REQUEST FOR ADMISSION NO. 86:

Ecojet manufactures the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 86:

Denied.

REQUEST FOR ADMISSION NO. 87:

Ecojet manufactures the “Universal Magnetic Wet-End.”

RESPONSE TO REQUEST FOR ADMISSION NO. 87:

Denied.

REQUEST FOR ADMISSION NO. 88:

Ecojet. manufactures the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 88:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Denied.

REQUEST FOR ADMISSION NO. 89:

Ecojet manufactures the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 89:

Denied.

REQUEST FOR ADMISSION NO. 90:

Ecojet sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 90:

Denied.

REQUEST FOR ADMISSION NO. 91:

Ecojet sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 91:

Denied.

REQUEST FOR ADMISSION NO. 92:

Ecojet sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 92:

Denied.

REQUEST FOR ADMISSION NO. 93:

Ecojet sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 93:

Denied.

REQUEST FOR ADMISSION NO. 94:

Ecojet sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 94:

Denied.

REQUEST FOR ADMISSION NO. 95:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Ecojet sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 95:

Denied.

REQUEST FOR ADMISSION NO. 96:

Ecojet sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 96:

Denied.

REQUEST FOR ADMISSION NO. 97:

Ecojet has made no effort to design around U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR ADMISSION NO. 97:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 98:

Ecojet has made no effort to design around U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR ADMISSION NO. 98:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 99:

Ecojet has made no effort to design around U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR ADMISSION NO. 99:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 100:

Ecojet has made no effort to design around U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 100:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 101:

Ecojet has made no effort to design around U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR ADMISSION NO. 101:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 102:

Ecojet has made no effort to design around U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR ADMISSION NO. 102:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 103:

Ecojet has made no effort to design around U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR ADMISSION NO.103:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Ecojet, Inc. never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 104:

Ecojet has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 104:

Admit.

REQUEST FOR ADMISSION NO. 105:

Ecojet has attempted to sell Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 105:

Denied.

REQUEST FOR ADMISSION NO. 106:

Ecojet has sold Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 106:

Denied.

LEXOR STORE

REQUEST FOR ADMISSION NO. 107:

Lexor Store, LLC manufactures the “Ecojet MD Wet End Set 3.0, SKU: 601119.”

RESPONSE TO REQUEST FOR ADMISSION NO. 107:

Denied.

REQUEST FOR ADMISSION NO. 108:

Lexor Store, LLC manufactures the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 108:

Denied.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

REQUEST FOR ADMISSION NO. 109:

Lexor Store, LLC manufactures the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 109:

Denied.

REQUEST FOR ADMISSION NO. 110:

Lexor Store, LLC manufactures the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 110:

Denied.

REQUEST FOR ADMISSION NO. 111:

Lexor Store, LLC manufactures the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 111:

Denied.

REQUEST FOR ADMISSION NO. 112:

Lexor Store, LLC manufactures the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 112:

Denied.

REQUEST FOR ADMISSION NO. 113:

Lexor Store, LLC manufactures the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 113:

Denied.

REQUEST FOR ADMISSION NO. 114:

Lexor Store, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 114:

Denied.

REQUEST FOR ADMISSION NO. 115:

Lexor Store, LLC sells the “Ecojet MD Wet End Set 3.0, SKU: 601119.”

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

RESPONSE TO REQUEST FOR ADMISSION NO. 115:

Denied.

REQUEST FOR ADMISSION NO. 116:

Lexor Store, LLC sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 116:

Denied.

REQUEST FOR ADMISSION NO. 117:

Lexor Store, LLC sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 117:

Denied.

REQUEST FOR ADMISSION NO. 118:

Lexor Store, LLC sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 118:

Denied.

REQUEST FOR ADMISSION NO. 119:

Lexor Store, LLC sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 119:

Denied.

REQUEST FOR ADMISSION NO. 120:

Lexor Store, LLC sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 120:

Denied.

REQUEST FOR ADMISSION NO. 121:

Lexor Store, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 121:

Denied.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Page 27 of 55

REQUEST FOR ADMISSION NO. 122:

Lexor Store, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 122:

Denied.

REQUEST FOR ADMISSION NO. 123:

Lexor Store, LLC has made no effort to design around U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR ADMISSION NO. 123:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 124:

Lexor Store, LLC has made no effort to design around U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR ADMISSION NO. 124:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 125:

Lexor Store, LLC has made no effort to design around U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR ADMISSION NO. 125:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 126:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Lexor Store, LLC has made no effort to design around U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 126:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 127:

Lexor Store, LLC has made no effort to design around U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR ADMISSION NO. 127:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 128:

Lexor Store, LLC has made no effort to design around U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR ADMISSION NO. 128:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 129:

Lexor Store, LLC Lexor Inc. has made no effort to design around U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 129:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Lexor Store, LLC never manufactured,

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 130:

Lexor Store, LLC has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 130:

Admit.

REQUEST FOR ADMISSION NO. 131:

Lexor Store, LLC has attempted to sell Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 131:

Denied.

REQUEST FOR ADMISSION NO. 132:

Lexor Store, LLC has not stopped manufacturing and selling Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 132:

Christopher Luong objects to this request on the grounds that it is predicated on false assumptions of fact. Lexor Store, LLC. never sold the Accused Products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 133:

Lexor Store, LLC has sold Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 133:

Denied.

PRO SPA DEPOT

REQUEST FOR ADMISSION NO. 134:

Pro Spa Depot, LLC sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

RESPONSE TO REQUEST FOR ADMISSION NO. 134:

Denied.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

REQUEST FOR ADMISSION NO. 135:

Pro Spa Depot, LLC sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 135:

Denied.

REQUEST FOR ADMISSION NO. 136:

Pro Spa Depot, LLC sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 136:

Denied.

REQUEST FOR ADMISSION NO. 137:

Pro Spa Depot, LLC sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 137:

Denied.

REQUEST FOR ADMISSION NO. 138:

Pro Spa Depot, LLC sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 138:

Denied.

REQUEST FOR ADMISSION NO. 139:

Pro Spa Depot, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 139:

Denied.

REQUEST FOR ADMISSION NO. 140:

Pro Spa Depot, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 140:

Denied.

REQUEST FOR ADMISSION NO. 141:

Pro Spa Depot, LLC sells the “Ecojet Universal Wet End Set 3.5, SKU: 601122.”

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

RESPONSE TO REQUEST FOR ADMISSION NO. 141:

Denied.

REQUEST FOR ADMISSION NO. 142:

Pro Spa Depot, LLC sells the “Ecojet Universal Jet Set 3.5, SKU: 601121.”

RESPONSE TO REQUEST FOR ADMISSION NO. 142:

Denied.

REQUEST FOR ADMISSION NO. 143:

Pro Spa Depot, LLC sells the “Ecojet MD Jet Set 3.0, SKU: 601118.”

RESPONSE TO REQUEST FOR ADMISSION NO. 143:

Denied.

REQUEST FOR ADMISSION NO. 144:

Pro Spa Depot, LLC sells the “Universal Whirlpool Magnetic Jet System.”

RESPONSE TO REQUEST FOR ADMISSION NO. 144:

Denied.

REQUEST FOR ADMISSION NO. 145:

Pro Spa Depot, LLC sells the “Ecojet Impeller.”

RESPONSE TO REQUEST FOR ADMISSION NO. 145:

Denied.

REQUEST FOR ADMISSION NO. 146:

Pro Spa Depot, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 146:

Denied.

REQUEST FOR ADMISSION NO. 147:

Pro Spa Depot, LLC sells the “Ecojet II Magnetic Drive.”

RESPONSE TO REQUEST FOR ADMISSION NO. 147:

Denied.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

REQUEST FOR ADMISSION NO. 148:

Pro Spa Depot, LLC has made no effort to design around U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR ADMISSION NO. 148:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Pro Spa Depot, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 149:

Pro Spa Depot, LLC has made no effort to design around U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR ADMISSION NO. 149:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Pro Spa Depot, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 150:

Pro Spa Depot, LLC has made no effort to design around U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR ADMISSION NO. 150:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Pro Spa Depot, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 151:

Pro Spa Depot, LLC has made no effort to design around U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR ADMISSION NO. 151:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Pro Spa Depot, LLC never manufactured,

distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 152:

Pro Spa Depot, LLC has made no effort to design around U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR ADMISSION NO. 152:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Pro Spa Depot, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 153:

Pro Spa Depot, LLC LEXOR Inc. has made no effort to design around U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR ADMISSION NO. 153:

Christopher Luong objects to this request on the grounds that “design around” is vague and ambiguous. Christopher Luong states that Pro Spa Depot, LLC never manufactured, distributed or sold any products. Christopher Luong further incorporates the Preamble as if set forth fully herein.

REQUEST FOR ADMISSION NO. 154:

Pro Spa Depot, LLC has no license or other permission from Luraco to manufacture, sell, or offer to sell products that contain all elements of any claim of any patent owned by Luraco.

RESPONSE TO REQUEST FOR ADMISSION NO. 154:

Denied.

REQUEST FOR ADMISSION NO. 155:

Pro Spa Depot, LLC has attempted to sell Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 155:

Denied.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

REQUEST FOR ADMISSION NO. 156:

Pro Spa Depot, LLC has not stopped manufacturing and selling Accused Products.

RESPONSE TO REQUEST FOR ADMISSION NO. 156:

Denied.

REQUEST FOR ADMISSION NO. 157:

Pro Spa Depot, LLC has sold Accused Products to Veganic Nails Spa.

RESPONSE TO REQUEST FOR ADMISSION NO. 157:

Denied.

REQUESTS FOR PRODUCTION

REQUEST FOR PRODUCTION NO. 1:

All Communications between Luraco and Lexor Companies.

RESPONSE TO REQUEST FOR PRODUCTION NO. 1:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the grounds that it seeks the production of information that is equally available to the Plaintiff. Christopher Luong states that he will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 2:

All Communications that mention Luraco.

RESPONSE TO REQUEST FOR PRODUCTION NO. 2:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-

privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 3:

All Communications that mention Tom Le.

RESPONSE TO REQUEST FOR PRODUCTION NO. 3:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 4:

All Communications that mention Kevin Le.

RESPONSE TO REQUEST FOR PRODUCTION NO. 4:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 5:

All Communications that mention U.S. Patent No. 9,926,933.

RESPONSE TO REQUEST FOR PRODUCTION NO. 5:

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

Page 36 of 55

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 6:

All Communications that mention U.S. Patent No. 10,215,178.

RESPONSE TO REQUEST FOR PRODUCTION NO. 6:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 7:

All Communications that mention U.S. Patent No. 10,302,088.

RESPONSE TO REQUEST FOR PRODUCTION NO. 7:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 8:

All Communications that mention U.S. Patent No. 10,288,071.

RESPONSE TO REQUEST FOR PRODUCTION NO. 8:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 9:

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

All Communications that mention U.S. Patent No. 10,215,177.

RESPONSE TO REQUEST FOR PRODUCTION NO. 9:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 10:

All Communications that mention U.S. Patent No. 10,278,894.

RESPONSE TO REQUEST FOR PRODUCTION NO. 10:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 11:

All Communications that mention U.S. Patent No. 10,451,071.

RESPONSE TO REQUEST FOR PRODUCTION NO. 11:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents responsive to this request that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 12:

All Communications mentioning Luraco or any known agent of Luraco, including but not limited to any employee, contractor, or distributor.

RESPONSE TO REQUEST FOR PRODUCTION NO. 12:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks

information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 13:

All Communications and Documents discussing Luraco Products including but not limited to all demand letters sent to Luraco's dealers and distributors.

RESPONSE TO REQUEST FOR PRODUCTION NO. 13:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce all non-privileged documents reflecting communications relating to the patents asserted by Luraco that can be located upon a reasonable search.

REQUEST FOR PRODUCTION NO. 14:

All Documents showing the sales earned by Lexor Companies for sale of the Accused Products, separately by company, showroom, dealer, and model number.

RESPONSE TO REQUEST FOR PRODUCTION NO. 14:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce documents sufficient to show the sales of the Accused Products.

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

REQUEST FOR PRODUCTION NO. 15:

All Documents showing sales by Lexor Companies of Spa Pumps and Spa Tubs, including inquiries about products from customers, purchase orders, purchase acknowledgments, shipping Documentation, invoices, and receipts.

RESPONSE TO REQUEST FOR PRODUCTION NO. 15:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 16:

All Documents relating to the importation of any Spa Pumps and Spa Tubs sold by Lexor Companies (“Imported Products”) to which Luong has access, including but not limited to all requests for quotes for purchase and purchase orders for the Imported Products, quotes from potential vendors and purchase orders for components of Spa Pumps and Spa Tubs, including also all contracts, purchase order acknowledgements, terms and conditions of such sales and purchases, invoices, bills of lading, and customs declarations.

RESPONSE TO REQUEST FOR PRODUCTION NO. 16:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 17:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Page 40 of 55

The certificate of formation of all businesses in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 17:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 18:

The articles of formation of all business entities in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 18:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 19:

All assumed name certificates filed by Luong in any state, including those he has filed using the spelling of “Long”, “Luong”, or any other name.

RESPONSE TO REQUEST FOR PRODUCTION NO. 19:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 20:

All partnership agreements of all business entities in which Luong is a partner, manager, or director.

RESPONSE TO REQUEST FOR PRODUCTION NO. 20:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

REQUEST FOR PRODUCTION NO. 21:

To the extent not already requested, all Documents which create a business entity in which Luong owns an interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 21:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 22:

The articles of formation of all businesses in which Nguyen has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 22:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 23:

All partnership agreements of all businesses in which Nguyen is a partner.

RESPONSE TO REQUEST FOR PRODUCTION NO. 23:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 24:

All partnership agreements of all partnerships in which Nguyen is a manager or director.

RESPONSE TO REQUEST FOR PRODUCTION NO. 24:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 25:

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

To the extent not already requested, all Documents which create a business entity in which Nguyen owns an interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 25:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 26:

All corporate governing Documents of all businesses in which Nguyen has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 26:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 27:

All Spa Pump and Spa Tub models, part numbers, and catalogs displaying those parts sold by any organization which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 27:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 28:

All Spa Pump and Spa Tub models, part numbers, and catalogs displaying those parts sold by all Lexor Companies, to the extent not already produced.

RESPONSE TO REQUEST FOR PRODUCTION NO. 28:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 29:

All Documents concerning meeting minutes, notes, and Communications related to all meetings, whether in person and telephonic, held by Lexor Companies' managers, directors, officers, shareholders, distributors, employees, and investors concerning the Accused Products.

RESPONSE TO REQUEST FOR PRODUCTION NO. 29:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 30:

All Documents sufficient to identify the organizational structure of Lexor Companies' employees, including the identity of any employee involved in the marketing, sales, design, engineering, manufacturing, research, development, importation, exportation, and commercialization of Spa Pumps and Spa Tubs, including but not limited to the reporting relationships of officers, directors, managers, research scientists, engineers, designers, employees, and agents whose duties or responsibilities relate in any way to Spa Pumps or Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 30:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 31:

All Documents concerning revenue generated, anticipated revenue, and sales projections for Spa Pumps and Spa Tubs for all Lexor Companies and all other companies in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 31:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case. Subject to and without waiving these objections, Christopher Luong states that it will produce documents sufficient to show the sales of the Accused Products.

REQUEST FOR PRODUCTION NO. 32:

All Documents sufficient to show the parent corporations, subsidiaries, and affiliates of any business entity of any business in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 32:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 33:

All Documents sufficient to show any licenses, cross-licenses, and agreements concerning components of all Spa Pumps and Spa Tubs sold by any Lexor Company.

RESPONSE TO REQUEST FOR PRODUCTION NO. 33:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 34:

All Documents sufficient to show any licenses, cross-licenses, and agreements concerning components of all Accused Products sold by any Lexor Company, to the extent that such Documents have not already been produced.

RESPONSE TO REQUEST FOR PRODUCTION NO. 34:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 35:

All Documents sufficient to show any licenses, cross-licenses, and agreements concerning components of all Accused Products sold by any Lexor Company, to the extent that such Documents have not already been produced.

RESPONSE TO REQUEST FOR PRODUCTION NO. 35:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 36:

All Documents sufficient to show any licenses, cross-licenses, and agreements concerning components of all Accused Products sold by any Person other than a Lexor Company, to the extent that such Documents have not already been produced.

Note that “Person” includes business entities as defined in the definition section.

RESPONSE TO REQUEST FOR PRODUCTION NO. 36:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 37:

All Documents related to the development, manufacture, sale, and marketing of Spa Pumps and Spa Tubs, including but not limited to product specifications, marketing materials, and sales data.

RESPONSE TO REQUEST FOR PRODUCTION NO. 37:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 38:

All Documents related to any licenses or agreements between the Parties or with third parties, including but not limited to any licenses or agreements related to Spa Pumps and Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 38:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 39:

All Documents related to the financial performance of Spa Pumps and Spa Tubs including but not limited to sales data, revenue, and profit and loss statements.

RESPONSE TO REQUEST FOR PRODUCTION NO. 39:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 40:

All Documents related to any tests performed on Spa Pumps and Spa Tubs, including but not limited to all testing, modeling, and performance analyses related to Accused Products and

all such testing on products sold by Luraco, and all testing related to infringement or validity of all patents owned by any Luraco affiliate and patents owned by any Lexor Company.

RESPONSE TO REQUEST FOR PRODUCTION NO. 40:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 41:

All corporate governing Documents of the businesses that you mention in response to any Interrogatory.

RESPONSE TO REQUEST FOR PRODUCTION NO. 41:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 42:

To the extent not already produced, all documentation evincing the establishment of any business entity to which Luong owns an interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 42:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 43:

All schematics, drawings, and diagrams related to the design or manufacture of Spa Pumps and Spa Tubs. As well as all 3D CAD files related to the design or manufacture of Spa Pumps and Spa Tubs, including any files used to create molds, tooling, or other manufacturing components.

RESPONSE TO REQUEST FOR PRODUCTION NO. 43:

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 44:

All Documents related to the design and development of Spa Pumps and Spa Tubs, including but not limited to design specifications, engineering notes, and Correspondence between designers, engineers, and other personnel involved in the design process.

RESPONSE TO REQUEST FOR PRODUCTION NO. 44:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 45:

All Documents related to the bill of materials for all Spa Pumps and Spa Tubs sold by Lexor Companies, including but not limited to spreadsheets, databases, or other records used to manage or track the components used by Lexor Companies to manufacture Spa Pumps and Spa Tubs.

RESPONSE TO REQUEST FOR PRODUCTION NO. 45:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 46:

All purchase orders, invoices, and receipts related to the acquisition of components used in the manufacture of Spa Pumps and Spa Tubs, including any Correspondence with suppliers or manufacturers.

RESPONSE TO REQUEST FOR PRODUCTION NO. 46:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 47:

All Documents sufficient to identify articles, advertising and marketing of Spa Pumps and Spa Tubs including those concerning market approval, benefits, advantages, and superiority of Spa Pumps and Spa Tubs and features thereof.

RESPONSE TO REQUEST FOR PRODUCTION NO. 47:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 48:

All Document sufficient to identify test studies, or test markets, and the results, reactions, and industry knowledge gained in the test studies, or test markets where any Person viewed, analyzed, tried, purchased or tested water jet pumps.

RESPONSE TO REQUEST FOR PRODUCTION NO. 48:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 49:

To the extent not already produced, all Documents advertising Spa Pumps and Spa Tubs for sale held by any organization in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 49:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

Page 50 of 55

REQUEST FOR PRODUCTION NO. 50:

To the extent not already produced, all Documents advertising products which include a Spa Pump as a component held by all organizations in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 50:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 51:

To the extent not already produced, all Documents which provide pricing to any customer or potential customer of products that include a Spa Pump component held by any organization in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 51:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

REQUEST FOR PRODUCTION NO. 52:

To the extent not already produced, all invoices, receipts, or other Documentation related to the sale, transfer, or provisions of Spa Pumps and Spa Tubs held by any organization in which Luong has an ownership interest.

RESPONSE TO REQUEST FOR PRODUCTION NO. 52:

Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information is seeks is not proportional to the needs of the case.

INTERROGATORIES

INTERROGATORY NO. 1:

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

Page 51 of 55

List all Persons contacted to provide information used in replying to this set of discovery requests, along with their phone number, email address, and physical address, and all forms and variations of the Persons' names and addresses used in the last ten years to the extent known, e.g., Sam Nguyen is known to use other names than "Sam" and Christopher Luong has used the spelling Christopher Long in the past, and also known to have used a different first name from Christopher.

RESPONSE TO INTERROGATORY NO. 1:

Chris Luong, who can be contacted through counsel of record.

INTERROGATORY NO. 2:

Describe all companies which Luong has owned or which Luong has held an ownership interest, directly or indirectly, including but not limited to subsidiaries, affiliates, joint ventures, and any other entities that Luong has owned an interest, or that he has directed or managed, since January 1, 2019. In this interrogatory, the word "describe" means to provide the following information:

- (a) The company's legal name, address and telephone number;
- (b) The state of incorporation or organization;
- (c) The company's business purpose or line of business; and
- (d) The name and titles of company's officers or directors.

RESPONSE TO INTERROGATORY NO. 2:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

INTERROGATORY NO. 3:

Describe all companies which Nguyen has held an ownership interest, directly or indirectly, including but not limited to subsidiaries, affiliates, joint ventures, and any other

CHRISTOPHER LUONG'S DISCOVERY RESPONSES

entities that Nguyen has controlled, managed, directed, or held an interest since January 1, 2019.

In this interrogatory, the word “describe” includes the following information:

- (a) The company’s legal name, address and telephone number;
- (b) The state of incorporation or organization;
- (c) The company’s business purpose or line of business; and
- (d) The name and titles of company’s officers or directors.

RESPONSE TO INTERROGATORY NO. 3:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

INTERROGATORY NO. 4:

Describe all Accused Products, Spa Tubs, and Spa Pumps that Luong has sold or used in all businesses in which he has or had an ownership interest or manages for others, including the part number and business which sells the product, since January 1, 2018. In your answer, Describe whether the reported Accused Products, Spa Tubs, and Spa Pumps were manufactured by the business, or just purchased and resold by that business.

RESPONSE TO INTERROGATORY NO. 4:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

INTERROGATORY NO. 5:

Identify all individuals involved in the conception, design, development, manufacture, testing, and sale of all Accused Products, Spa Tubs, and Spa Pumps for all companies in which Luong has an ownership interest and state their job titles and responsibilities.

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

RESPONSE TO INTERROGATORY NO. 5:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

INTERROGATORY NO. 6:

Identify all Persons, entities, or organization to whom Luong has sold Spa Pumps and Spa Tubs to from April 1, 2014, to present, including those to whom you have sold Spa Pumps and Spa Tubs through all entities you own. In this interrogatory, the word “describe” includes the following information:

- (a) The name and address of the Person, entity, or organization;
- (b) The dates on which the Spa Pumps and Spa Tubs were sold transferred, or otherwise provided;
- (c) The quantity of Spa Pumps and Spa Tubs sold, transferred, or otherwise provided; and
- (d) The price paid for the Spa Pumps and Spa Tubs.

RESPONSE TO INTERROGATORY NO. 6:

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that the information it seeks is not proportional to the needs of the case.

INTERROGATORY NO. 7:

For each Person, entity, or organization identified in response to Interrogatory No. 6, provide a copy of any invoices, receipts, or other Documentation related to the sale, transfer, or provisions of Spa Pumps and Spa Tubs in the years 2020 to present.

RESPONSE TO INTERROGATORY NO. 7:

CHRISTOPHER LUONG’S DISCOVERY RESPONSES

Christopher Luong objects to this request to the extent it seeks the production of privileged material. Christopher Luong also objects to this request on the ground that it seeks information that is not subject to discovery. Christopher Luong also objects to this request on the ground that it the information is seeks is not proportional to the needs of the case.

Respectfully Submitted,

By: /s/ Andy Nikolopoulos
Andy Nikolopoulos
State Bar No. 24044852
FOX ROTHSCHILD LLP
Saint Ann Court
2501 N. Harwood St., Suite 1800
Dallas, TX 75240
Tel: 972/991-0889
Fax: 972/404-0516
Email: anikolopoulos@foxrothschild.com

Jeff Grant
FOX ROTHSCHILD LLP
10250 Constellation Blvd., Suite 900
Los Angeles, CA 90067
Tel: 310/228-4483
Fax: 310/556-9828
Email: jgrant@foxrothschild.com
Attorneys for Defendants



ECOJET MD MAGNETIC JET INSTALLATION GUIDE

WARNING: PLEASE READ AND FOLLOW SAFETY INSTRUCTIONS BEFORE USING THE EQUIPMENT. ALWAYS UNPLUG THE EQUIPMENT BEFORE SERVICING TO REDUCE THE RISK OF ELECTRIC SHOCK AND/OR PERSONAL INJURY.

NOTE: Ecojet MD magnetic motor & components are assembled in alignment as illustrated below. Please follow step-by-step instructions. (Rev. 1.2)

Ecojet MD package contents:

- 1 Ecojet MD Magnetic Motor
(Part#: EMD-1001)
- 2 Motor Cap Lock-Nut
(Part#: EMD-2108)
- 3 Universal Adapter (1pc.)
(Part#: EMD-2107)
- 4 Motor Housing Gasket
(Part#: EMD-2106)
- 5 Motor Housing
(Part#: EMD-2105)
- 6 Impeller Housing
(Part#: EMD-2104)
- 7 Magnetic Impeller
(Part#: EMD-2103)
- 8 Ecojet Cap Cover
(Part#: EMD-2101)
- 9 AC Power Cord
(Part#: EMD-2109)



**Dear Customer,
We congratulate you on the purchase of this quality product from Ecojet.**

2 YEAR LIMITED WARRANTY

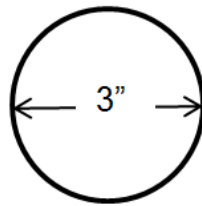
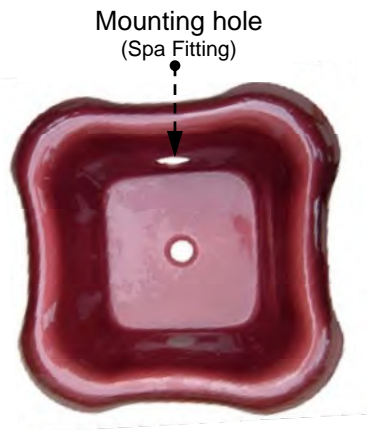
ECOJET will, within two (2) years from date of purchase, repair or replace (at Ecojet's option), the Ecojet magnetic motor free of charge if such movement proves to be defective in material or workmanship under normal use. The magnetic impeller and other components will be warranted for a period of one (1) year under normal usage. This warranty does not cover damage or defects arising from accidents, misuse or neglect, or from any alterations, service or repair performed by any party other than Ecojet or an authorized Ecojet service center.

Please address any Ecojet Warranty claim to an Ecojet Authorized Service Center. For the most current and complete listing, visit www.ecojetspa.com

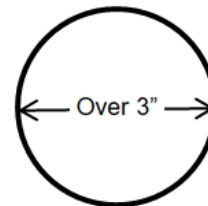
CAUTION: Electrical repairs can be dangerous, especially around water. Repairs must be made by a qualified electrician or spa technician. Regardless of who performs the work, make certain that all electrical power to the pedicure spa is disconnected prior to making any inspections or repairs.

Shut the power off at the service panel, and as a secondary precaution, disconnect the power to the spa as well. Do not attempt to perform electrical repairs unless you are qualified.

***Determine the correct fitting per application
(as illustrated)**



APPLICATION #1



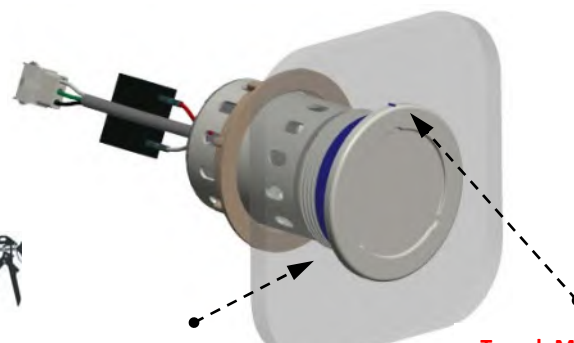
APPLICATION #2

Disconnect the plumbing at the rear of the spa if necessary, and lift the front spa off the floor by one to two feet off the ground or tilt the spa on its side (properly support the spa). Remove the existing motor.

APPLICATION #1: Installation Procedure



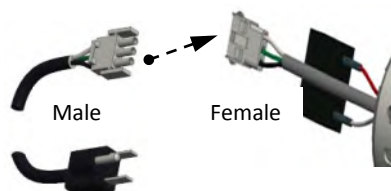
Apply a thin amount of silicone, then insert the motor through the spa basin. Then tighten Motor Cap Lock-Nut



Black line is at the 6 o'clock position

Trench Mark is at the 12 o'clock position

Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug (Illustrated)



APPLICATION #2: Installation Procedure

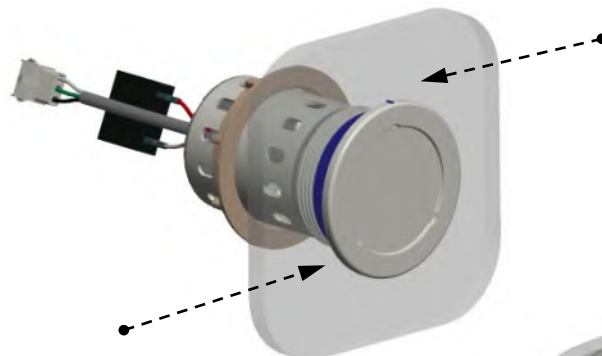
Step 1: Slide the Universal Adapter onto Motor Housing.



Step 2: Apply thin layer of silicone to the back of the Universal Adapter.

Step 3: Slide the Motor Housing through the hole of the spa basin. Slide the Universal Adapter (backside in) onto the Motor Housing, then hand tighten the Motor Cap Lock-Nut.

Important: please let it set for a period of 1/2 hours

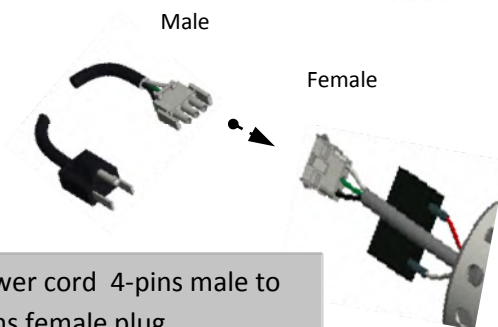


Trench Mark is at the 12 o'clock position

Black line is at the 6 o'clock position



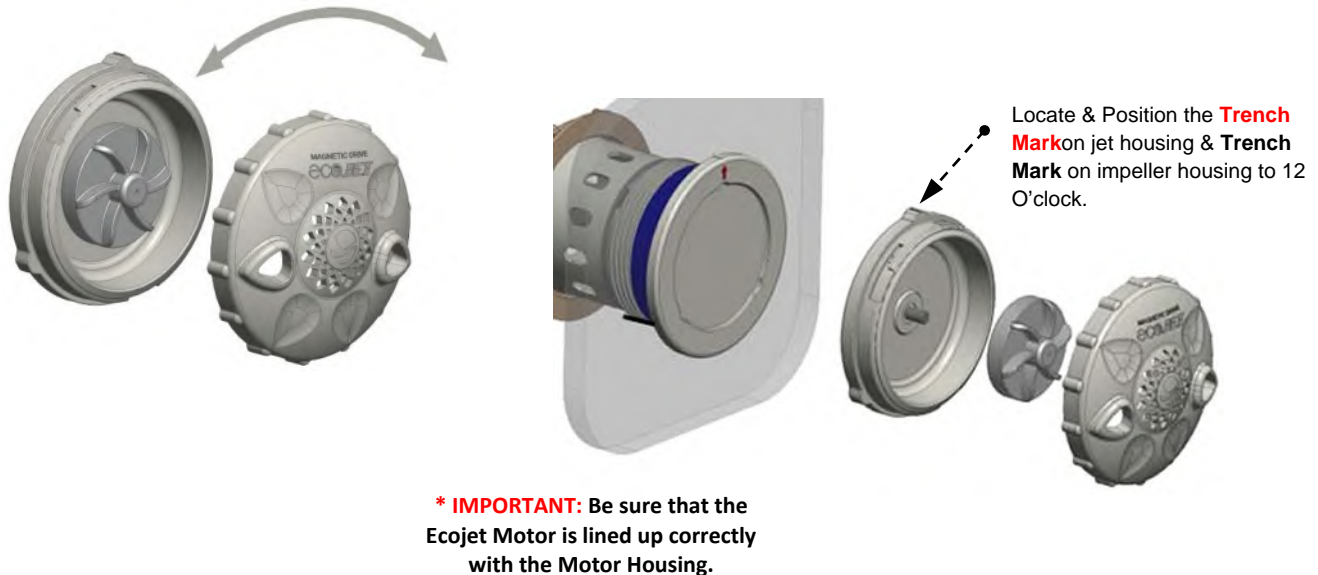
Step 4: Turn the motor clockwise until it lock into place. Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug.



Connect AC power cord 4-pins male to Ecojet MD 4-pins female plug (Illustrated)

Installation Procedure (Ready to use)

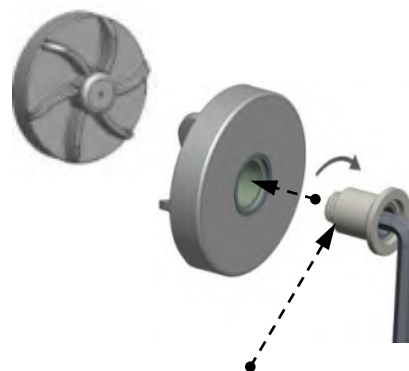
Illustrated below: Install Ecojet MD Housing set, then line up the top of the Ecojet Cap Cover to the Motor Housing turn it clockwise, to lock it in place. **READY TO USE.**



FOR PARTS & SERVICE, PLEASE REFER TO
www.ecojetspa.com



To service the Ecojet MD motor, turn the unit counter-clockwise



To service or replace the Ecojet MD impeller bushing, use a 4mm wrench (not included) to removed the bushing. (Part# EMD-2110 optional replacement items)



Lexor®

PEDI-SPA USER MANUAL

PRESTIGE™

ENVISION™

ELITE®

LUMINOUS®

INFINITY™

LIBERTÉ®

VERSAS®



Lexor®

THE KEY TO SALON SUCCESS

PEDICURE SPA USER MANUAL

Models: Prestige, Envision, Elite, Luminous, Infinity, Liberte & Versas.

Before Operating the unit, please read this manual thoroughly and retain it for future reference.

RECEIVING AND INSPECTION:

PLEASE TAKE NOTE! Thoroughly inspect each shipment immediately upon arrival. It is important that you notify the driver and insist on a notation of the damage. Make this notation directly on the freight company's waybill or bill of lading. Failure to note damage on the waybill or bill of lading may impede and/or prevent any claims that you may have against the freight carrier. If missing parts or damage is found, please notify the carrier at once and request an inspection. DO NOT DISCARD THE SHIPPING BOX. If you give the carrier a clear receipt for goods that have been damaged in transit, you do so at your own risk and expense

Table of Contents

Receiving And Inspection / Table Of Contents	1
Safety & Precautions	2
PARTS	
Identifying Parts for PRESTIGE™ Model	3
Identifying Parts for ENVISION™ Model	4
Identifying Parts for ELITE® Model	5
Identifying Parts for LUMINOUS® Model	6
Identifying Parts for INFINITY™ Model	7
Identifying Parts for LIBERTE® Model	8
Identifying Parts for VERSAS® Model	9
INSTALLATION	
Wall clearance & Spa Recommended Clearance:	10
Gravity Drain / Power Drain	11
Hot and Cold Water Supply Lines / Ventilation spa	12
SPA SPECIFICATION	
Electrical and Pedicure Spa Component Specifications / Auto-Fill™ Models Operation	13
OPERATION AND CARE	
Auto-Fill™ / Jet Switch / Drain Switch	14
Digital Control System (DCS)	15
Manual Operation	16
Magnetic Whirlpool Jet & Auto Fill Liner & Foot-rest Calf Support	17
Massage System & Remote Controller	17
Cleaning Suggestion for Pedicure Spas	18
WARRANTY & CERTIFICATION	
LEXOR LIMITED FACTORY WARRANTY	19
UL US & CANADA Certification	20
IAPMO UPC Certification	21
EURO Certification	22

Safety & Precaution**READ AND FOLLOW INSTRUCTIONS CAREFULLY****SAFETY PRECAUTIONS:****Warning**

**THIS PRODUCT IS FOR INDOOR USE ONLY & IS NOT RECOMMENDED FOR USE ON CARPET OR WOOD FLOORS
DISCONNECT POWER SUPPLY CORD BEFORE SERVICING**

This product is to be connected to a branch circuit outlet protected by a Class A GROUND FAULT CIRCUIT INTERRUPTER (GFCI), and the GFCI shall be tested regularly for continued protection and correct operation. If a Class A GFCI protected outlet is not available, **DO NOT USE THIS PRODUCT!** Please contact a licensed electrician for installation of a Class A GFCI according to local electric codes, or equivalent.

**Warning**

DO NOT USE if you are diabetic, have poor circulation, or if any area of your feet or legs is inflamed or has an open sore. Consult your physician before using if you have any kind of fungal infection, swelling, fracture or persistent pain.

**Warning**

TO REDUCE RISK OF INJURY, DO NOT PERMIT CHILDREN TO USE THIS UNIT UNLESS THEY ARE CLOSELY SUPERVISED AT ALL TIME

- LIRE LES INSTRUCTION DU FABRICANT AVANT DE METTRE EN MARCHE
- UTILISER SEULEMENT A L'INTERIEUR
- COUPER LE COURANT AVANT DE PROCEDRE AU DEPANNAGE, AU NETTOYAGE

**Warning**

1. Excessive water temperature is dangerous and should be checked BEFORE use.
2. Maximum temperature of the water should never exceed 100 degrees F.
3. DO NOT STEP/ STAND IN FOOT BASIN.
4. Always enter and exit the Pedicure Spa slowly and carefully.
5. NEVER bring and / or operate any electrical devices into or near the Pedicure Spa.
6. Maximum load in spa chair is 250lbs (114kg).
7. Do not over use of bleach or it will damage the spa , 1 teaspoon of 5.25% bleach for each gallon of water is recommended

**Warning**

PROPER INSTALLATION ACCORDING TO THIS MANUAL IS REQUIRED. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/OR WARRANTY WILL BE NULL. YOU MUST HAVE A QUALIFIED LICENSED PLUMBER TO CONNECT THE SPA IN PLACE SAFELY.

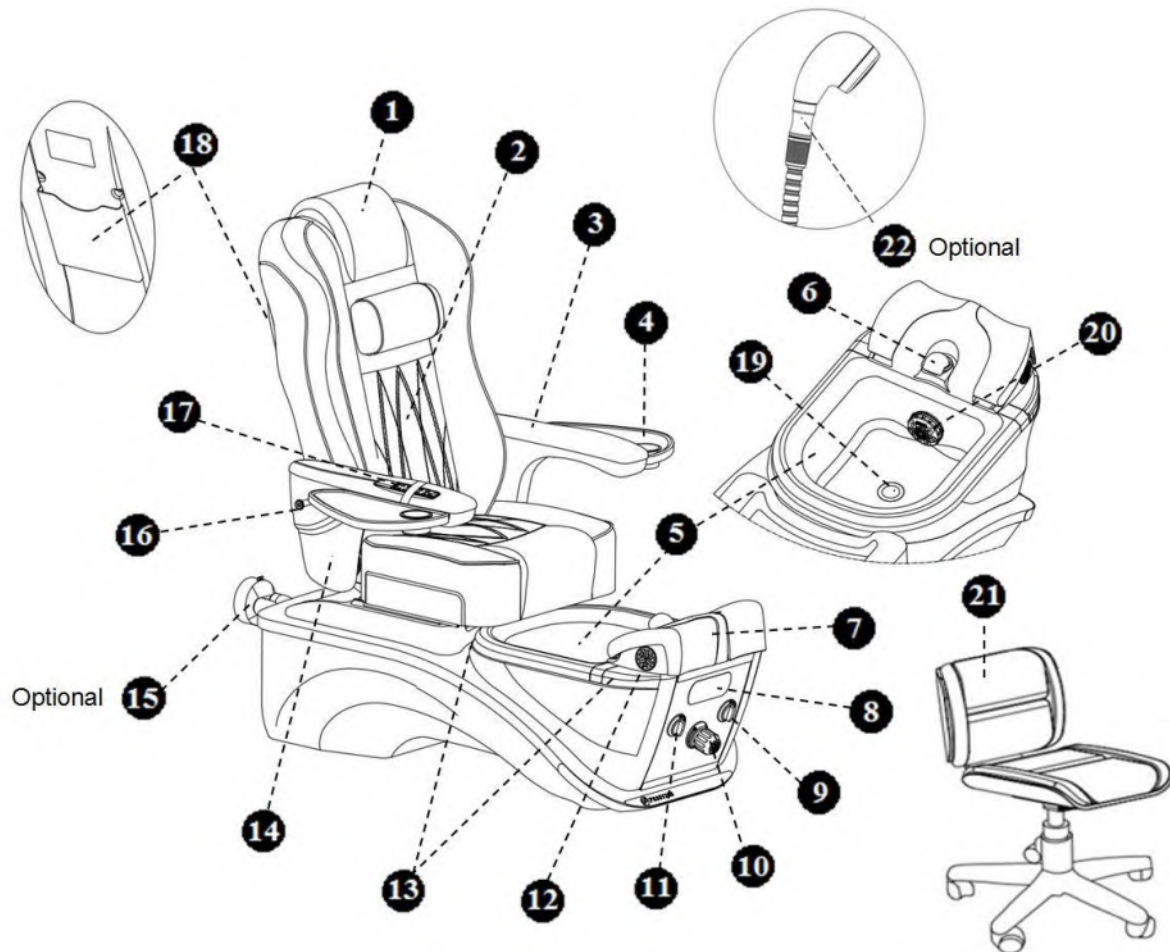
STATES' NOTICE

In the common wealth of most of the States, all pedicure spas shall be installed for Commercial usage in the states, are required to have backflow preventer. This equipment shall be installed between the water inlets and the spa at Salon's cost

PLEASE SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

Identifying Part

Identifying Parts for PRESTIGE™ Model

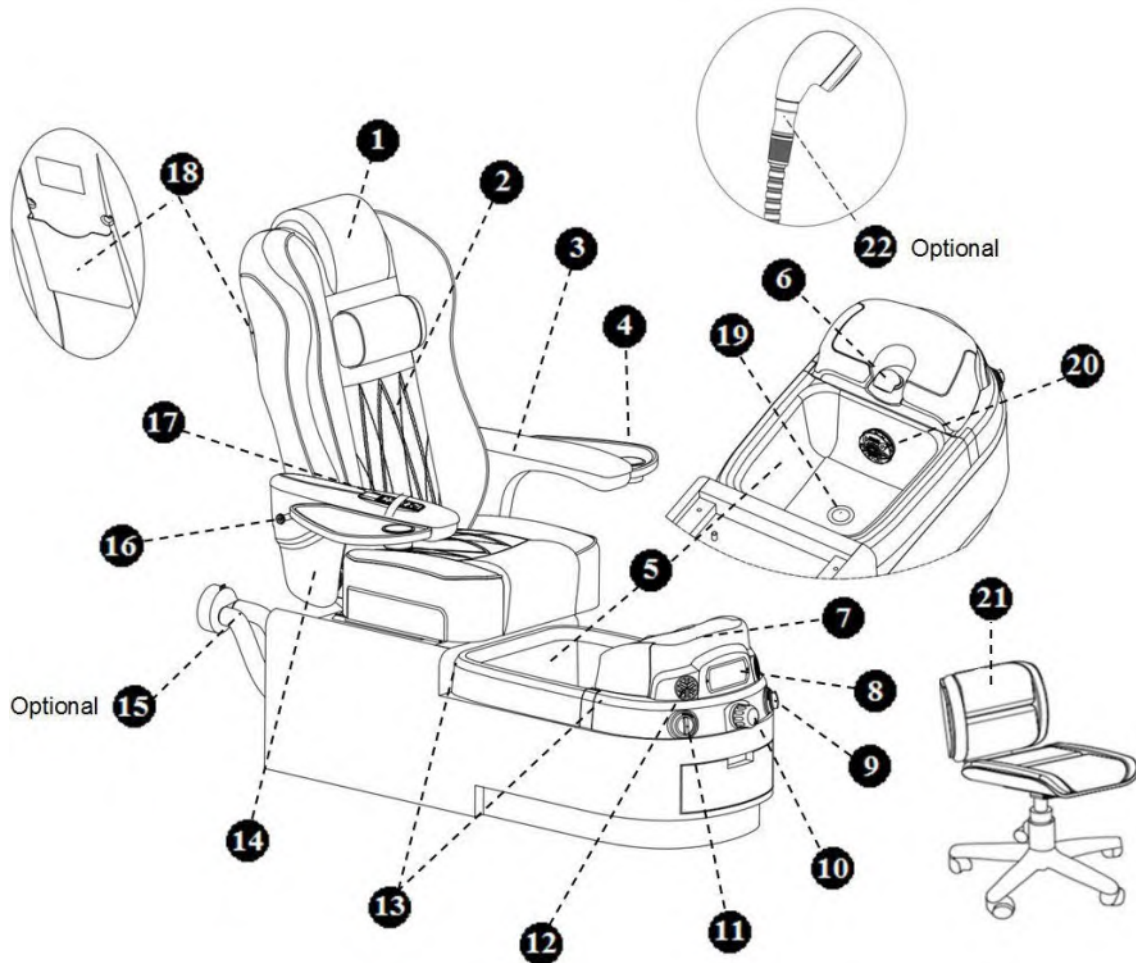


Pedicure Whirlpool with Massage System

- | | |
|---|---|
| 1. Headrest | 11. Sani-Drain™ System with discharge On/Off Knob |
| 2. Chair Cushion with Massage | 12. Vent Inlet (2 Places) |
| 3. Armrest Cushion | 13. Liner Hook |
| 4. Manicure-Tray | 14. Up/Down Armrest |
| 5. Aurora™ Bowl | 15. Vent Outlet (Optional) |
| 6. Flex Water Filler/Spray Spout | 16. Handbag (Purse) Hook |
| 7. Foot Rest with Calf Support | 17. Massage Remote Control |
| 8. Digital Control System Panel | 18. Paper Tray |
| 9. Dual Function Auto-Fill™ & Jet On/Off Knob | 19. Drain Stopper |
| 10. Hot/Cold Water Mixer Valve | 20. ECOJET® Magnetic Drive |
| | 21. Low Profile Pedicure Stool |
| | 22. Back Flow Preventer (Optional) |

Identifying Part

Identifying Parts for ENVISION™ Model

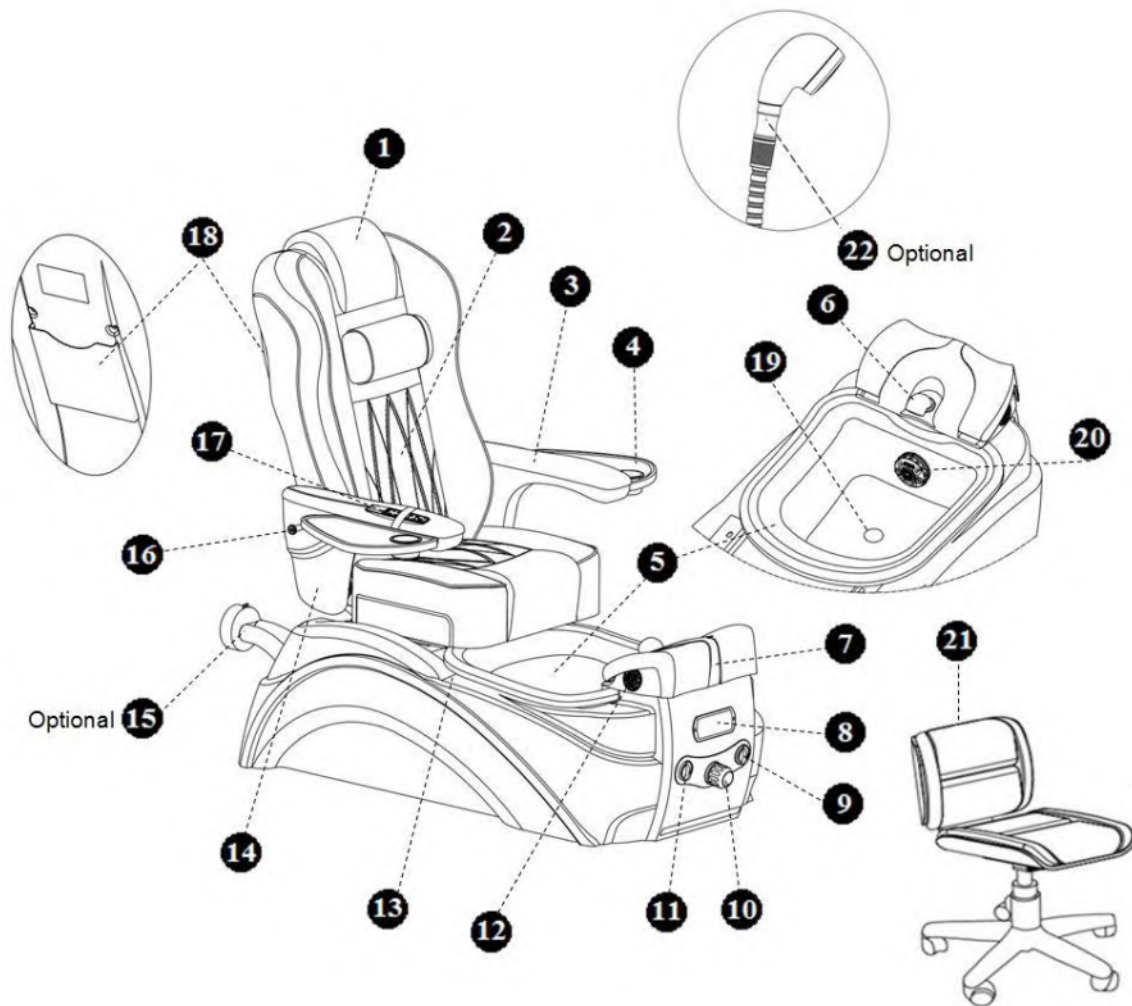


Pedicure Whirlpool with Massage System

- | | |
|---|---|
| 1. Headrest | 11. Sani-Drain™ System with discharge On/Off Knob |
| 2. Chair Cushion with Massage | 12. Vent Inlet (2 Places) |
| 3. Armrest Cushion | 13. Liner Hook |
| 4. Manicure-Tray | 14. Up/Down Armrest |
| 5. Aurora™ Bowl | 15. Vent Outlet (Optional) |
| 6. Flex Water Filler/Spray Spout | 16. Handbag (Purse) Hook |
| 7. Foot Rest with Calf Support | 17. Massage Remote Control |
| 8. Digital Control System Panel | 18. Paper Tray |
| 9. Dual Function Auto-Fill™ & Jet On/Off Knob | 19. Drain Stopper |
| 10. Hot/Cold Water Mixer Valve | 20. ECOJET® Magnetic Drive |
| | 21. Low Profile Pedicure Stool |
| | 22. Back Flow Preventer (Optional) |

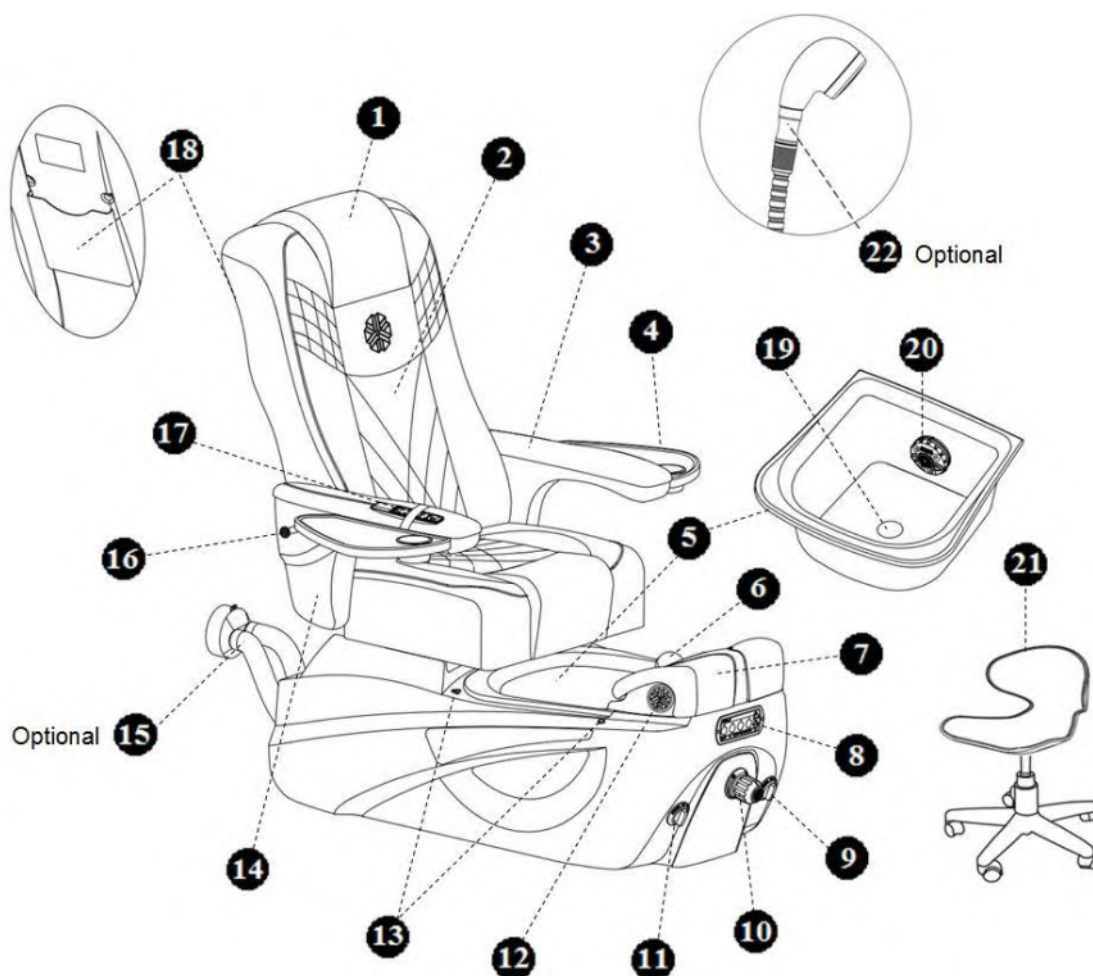
Identifying Part

Identifying Parts for ELITE® Model



Pedicure Whirlpool with Massage System

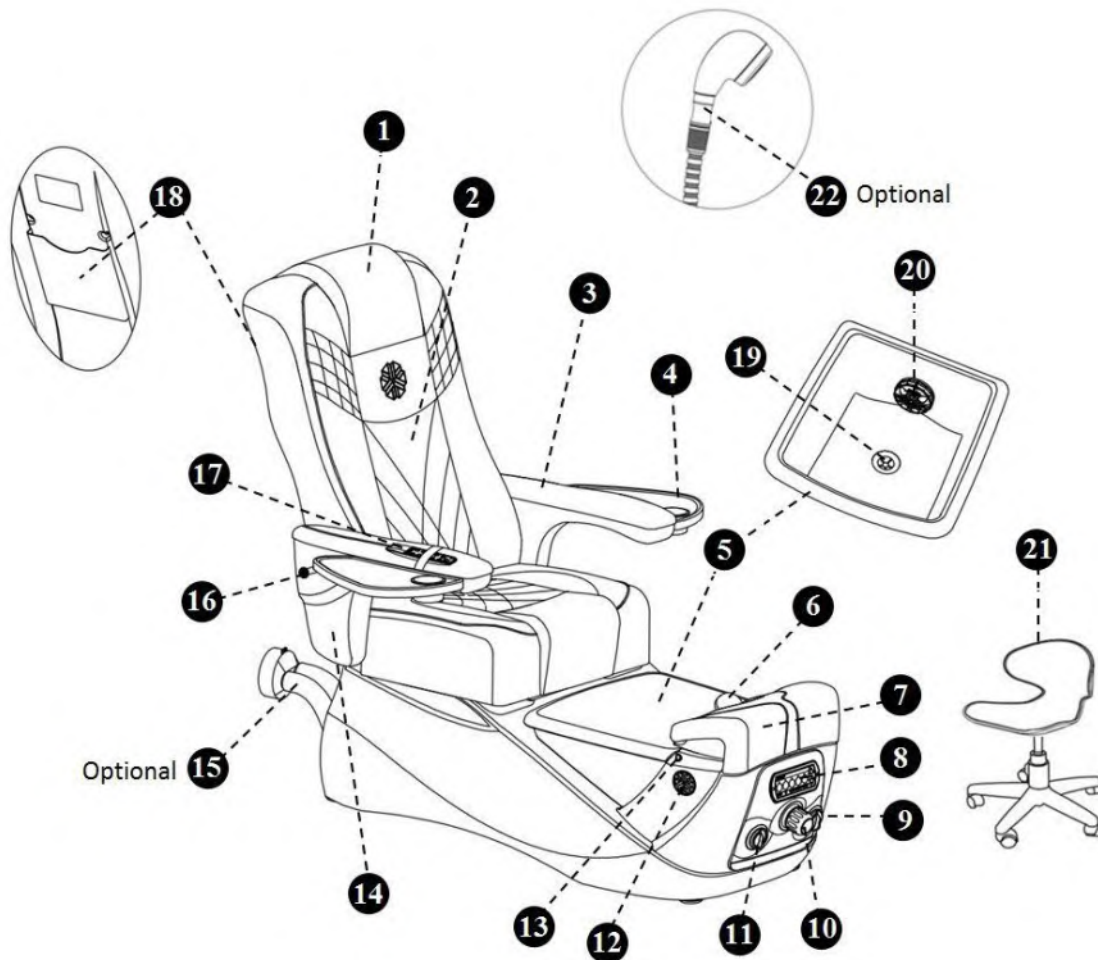
- | | |
|---|---|
| 1. Headrest | 11. Sani-Drain™ System with discharge On/Off Knob |
| 2. Chair Cushion with Massage | 12. Vent Inlet (2 Places) |
| 3. Armrest Cushion | 13. Liner Hook |
| 4. Manicure-Tray | 14. Up/Down Armrest |
| 5. Aurora™ Bowl | 15. Vent Outlet (Optional) |
| 6. Flex Water Filler/Spray Spout | 16. Handbag (Purse) Hook |
| 7. Foot Rest with Calf Support | 17. Massage Remote Control |
| 8. Digital Control System Panel | 18. Paper Tray |
| 9. Dual Function Auto-Fill™ & Jet On/Off Knob | 19. Drain Stopper |
| 10. Hot/Cold Water Mixer Valve | 20. ECOJET® Magnetic Drive |
| | 21. Low Profile Pedicure Stool |
| | 22. Back Flow Preventer (Optional) |

Identifying Part**Identifying Parts for LUMINOUS® Model****Pedicure Whirlpool with Massage System**

- | | |
|---|---|
| 1. Headrest | 11. Sani-Drain™ System with discharge On/Off Knob |
| 2. Chair Cushion with Massage | 12. Vent Inlet (2 Places) |
| 3. Armrest Cushion | 13. Liner Hook |
| 4. Manicure-Tray | 14. Up/Down Armrest |
| 5. Aurora™ Bowl | 15. Vent Outlet (Optional) |
| 6. Flex Water Filler/Spray Spout | 16. Handbag (Purse) Hook |
| 7. Foot Rest with Calf Support | 17. Massage Remote Control |
| 8. Digital Control System Panel | 18. Paper Tray |
| 9. Dual Function Auto-Fill™ & Jet On/Off Knob | 19. Drain Stopper |
| 10. Hot/Cold Water Mixer Valve | 20. ECOJET® Magnetic Drive |
| | 21. Low Profile Pedicure Stool |
| | 22. Back Flow Preventer (Optional) |

Identifying Part

Identifying Parts for INFINITY™ Model

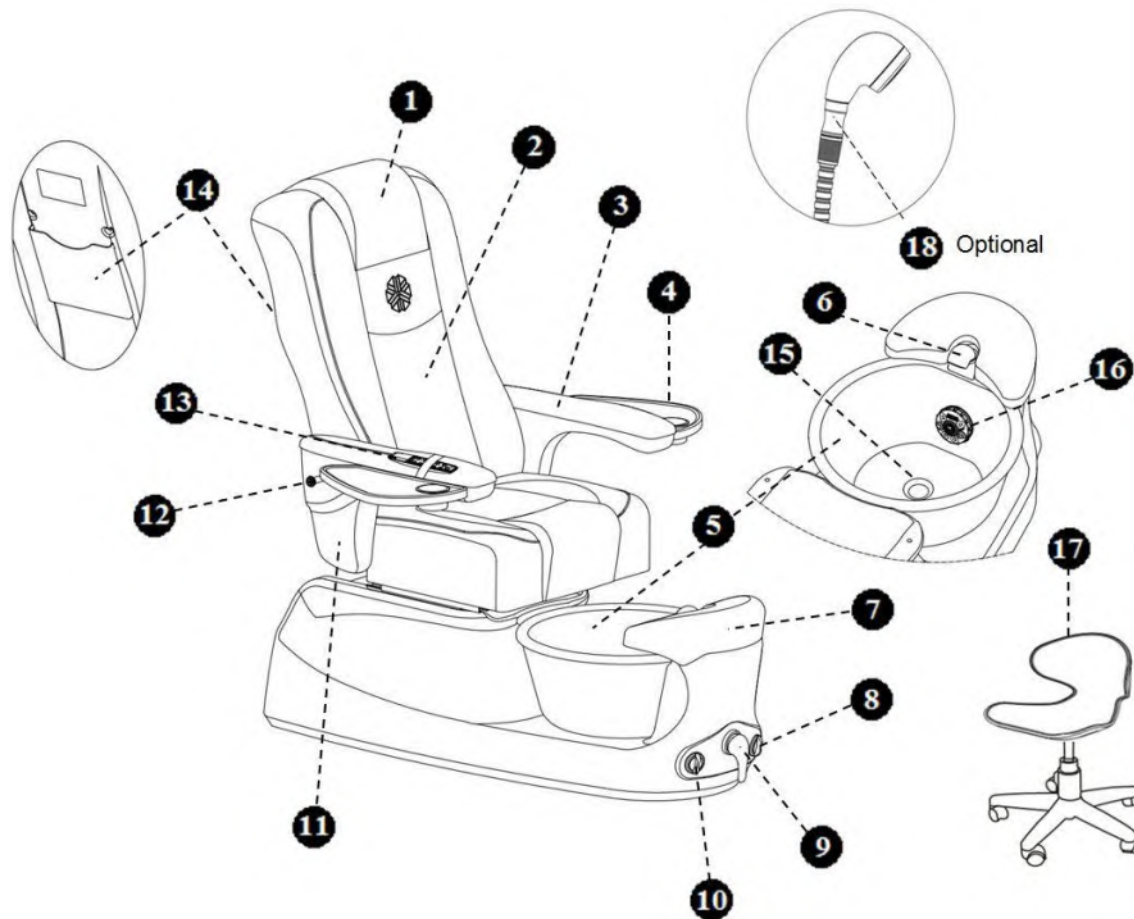


Pedicure Whirlpool with Massage System

- | | |
|---|---|
| 1. Headrest | 11. Sani-Drain™ System with discharge On/Off Knob |
| 2. Chair Cushion with Massage | 12. Vent Inlet (2 Places) |
| 3. Armrest Cushion | 13. Liner Hook |
| 4. Manicure-Tray | 14. Up/Down Armrest |
| 5. Aurora™ Bowl | 15. Vent Outlet (Optional) |
| 6. Flex Water Filler/Spray Spout | 16. Handbag (Purse) Hook |
| 7. Foot Rest with Calf Support | 17. Massage Remote Control |
| 8. Digital Control System Panel | 18. Paper Tray |
| 9. Dual Function Auto-Fill™ & Jet On/Off Knob | 19. Drain Stopper |
| 10. Hot/Cold Water Mixer Valve | 20. ECOJET® Magnetic Drive |
| | 21. Low Profile Pedicure Stool |
| | 22. Back Flow Preventer (Optional) |

Identifying Part

Identifying Parts for LIBERTE® Model

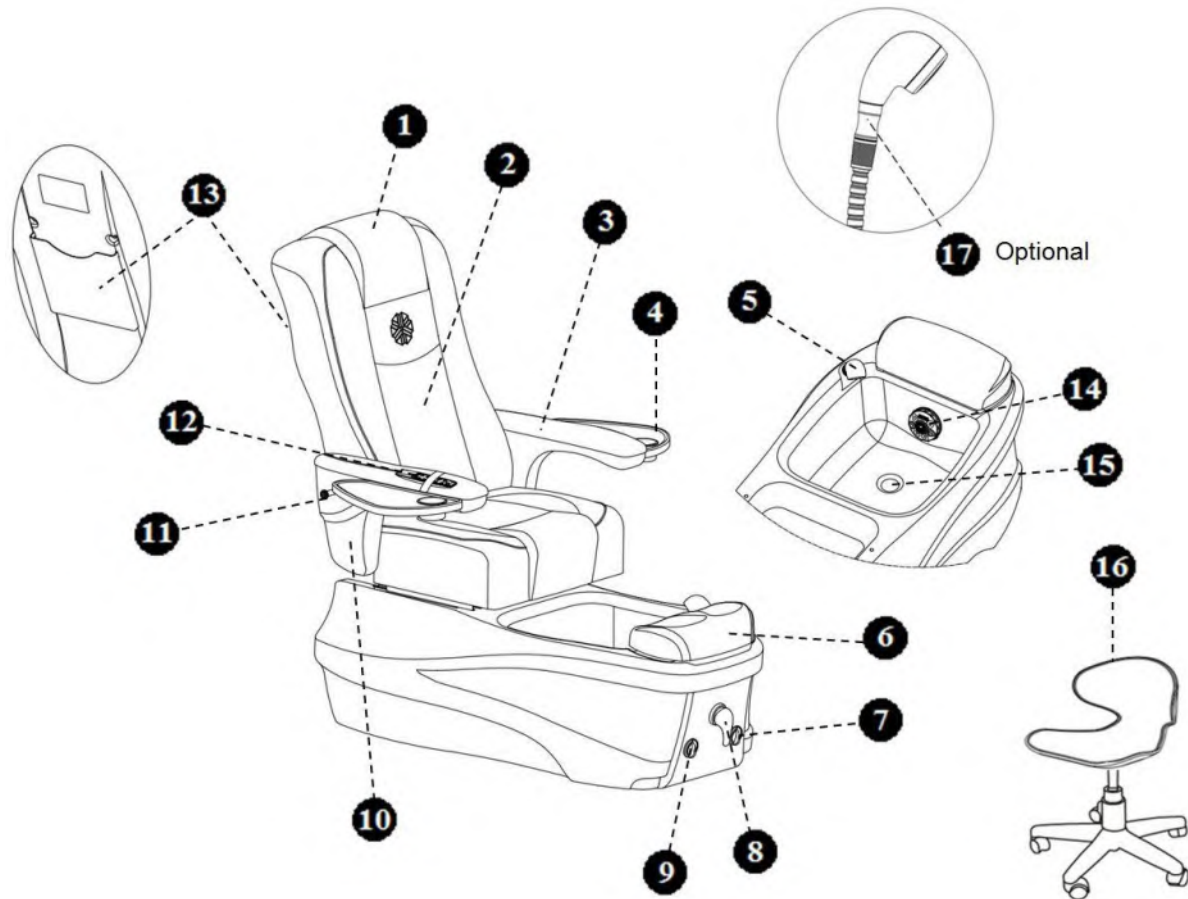


Pedicure Whirlpool with Massage System

- | | |
|---|------------------------------------|
| 1. Headrest | 11. Up/Down Armrest |
| 2. Chair Cushion with Massage | 12. Handbag (Purse) Hook |
| 3. Armrest Cushion | 13. Massage Remote Control |
| 4. Manicure-Tray | 14. Paper Tray |
| 5. Glass Bowl | 15. Drain Stopper |
| 6. Flex Water Filler/Spray Spout | 16. ECOJET® Magnetic Drive |
| 7. Adjustable Foot Rest | 17. Low Profile Pedicure Stool |
| 8. Jet On/Off Knob | 18. Back Flow Preventer (Optional) |
| 9. Hot/Cold Water Mixer Valve | |
| 10. Sani-Drain™ System with discharge On/Off Knob | |

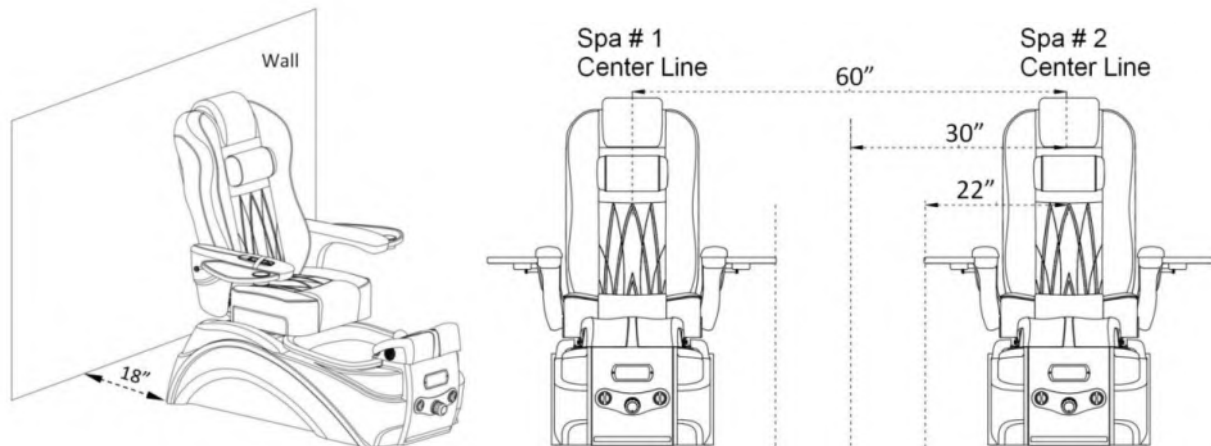
Identifying Part

Identifying Parts for VERSAS® Model

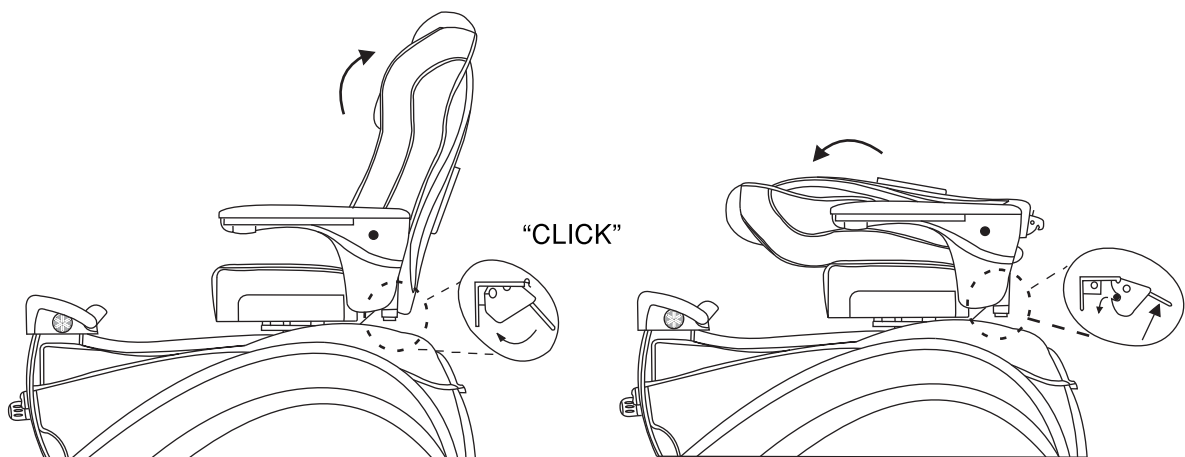


Pedicure Whirlpool with Massage System

- | | |
|--|------------------------------------|
| 1. Headrest | 10. Up/Down Armrest |
| 2. Chair Cushion with Massage | 11. Handbag (Purse) Hook |
| 3. Armrest Cushion | 12. Massage Remote Control |
| 4. Manicure-Tray | 13. Paper Tray |
| 5. Flex Water Filler/Spray Spout | 14. Drain Stopper |
| 6. Adjustable Foot Rest | 15. ECOJET® Magnetic Drive |
| 7. Jet On/Off Knob | 16. Low Profile Pedicure Stool |
| 8. Hot/Cold Water Mixer Valve | 17. Back Flow Preventer (Optional) |
| 9. Sani-Drain™ System with discharge On/Off Knob | |

Installation**WALL CLEARANCE & SPA to SPA RECOMMENDED CLEARANCE**

VERY IMPORTANT Both back of chair and seat are adjustable. When both are at maximum positions, one must allow 18"(44cm) from back wall to foot spa. This minimum distance assures unobstructed recline. Failure to follow this required dimension might damage your spa components and plumbing connections, which will void your warranty.

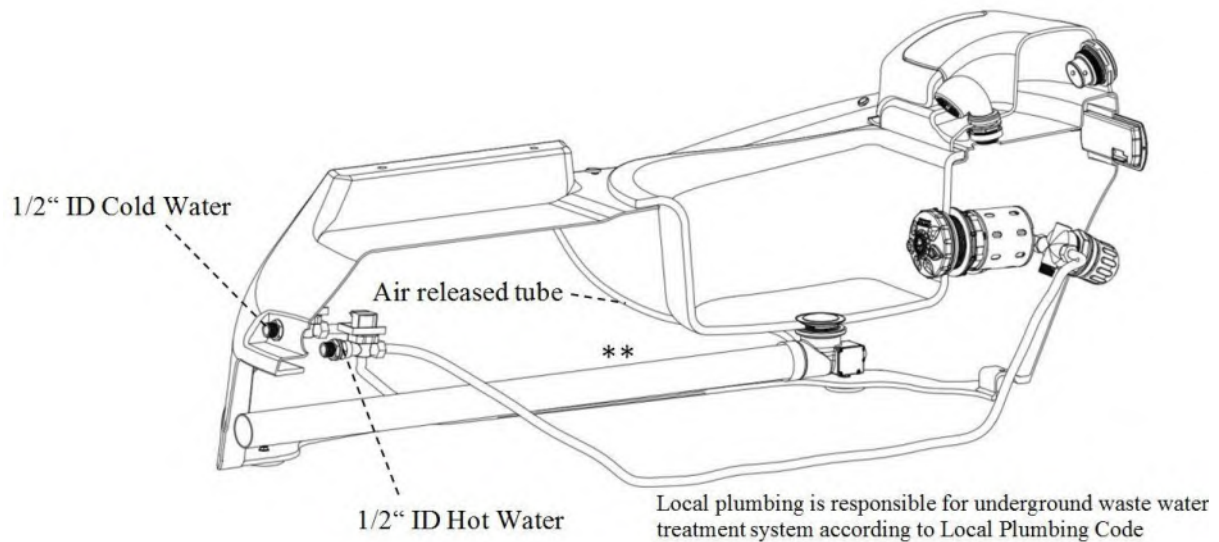
TOP CHAIR 1: FOLD & UNFOLD BACK-REST MASSAGE

Raise the backrest until a "CLICK" is heard. Make sure the lever is locked before operating

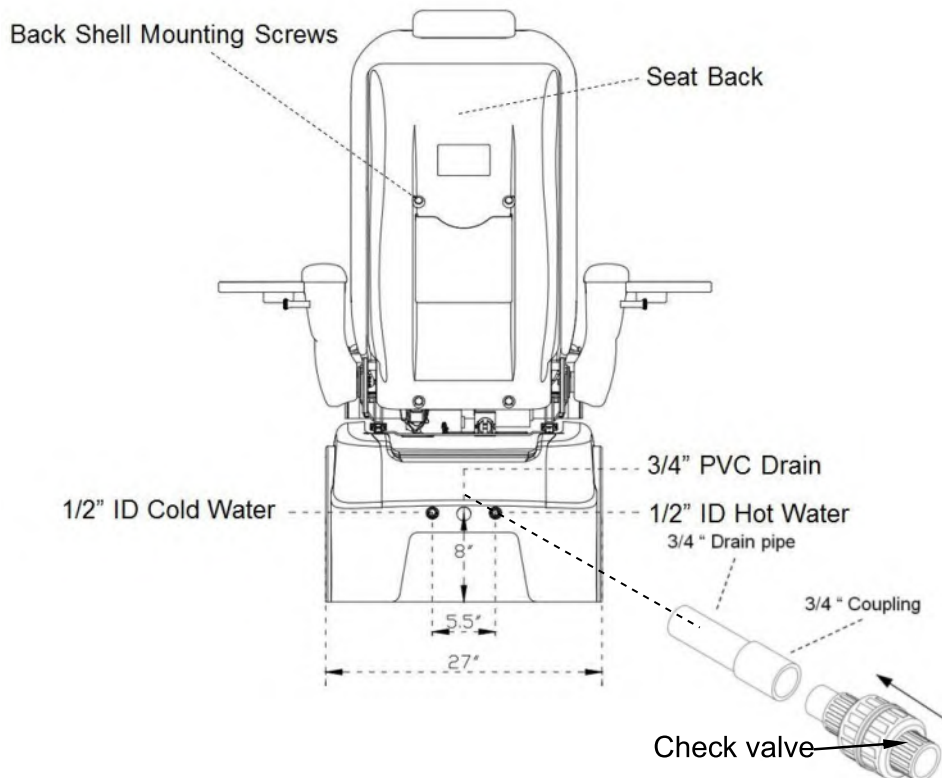
To fold down backrest: Lift up lever handle.

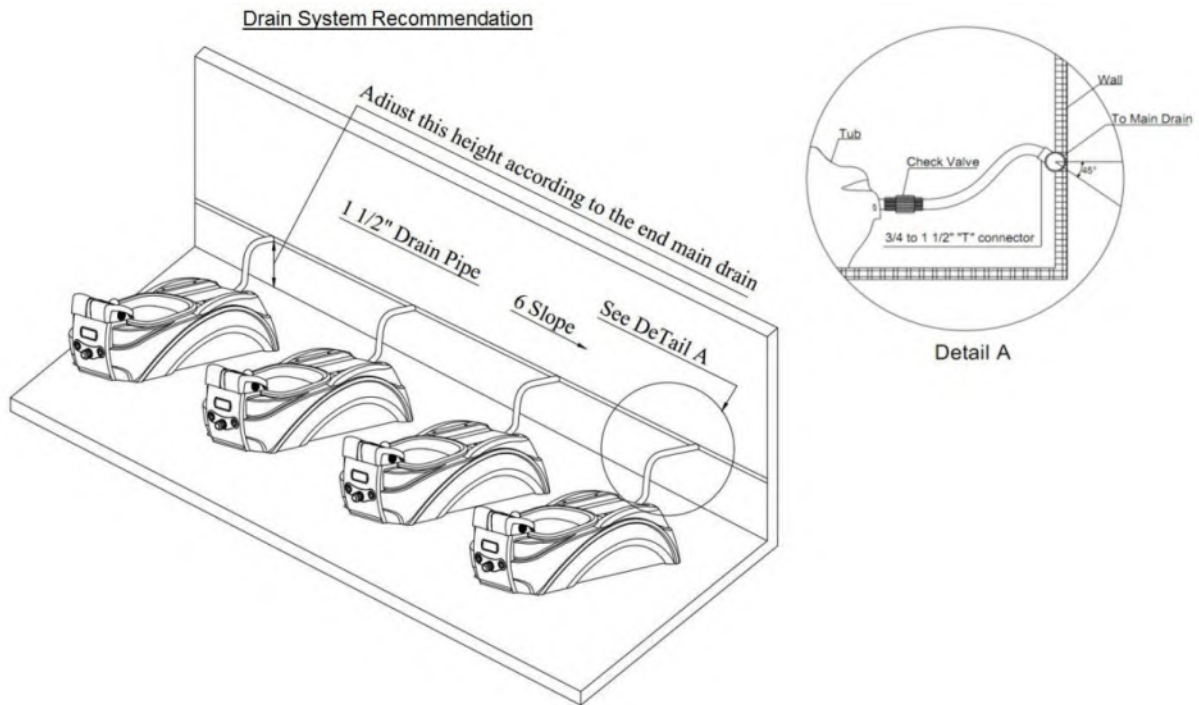
Installation**GRAVITY DRAIN**

** Extra 1 1/4" Flex Hose is supplied for fast connecting to underground 1 1/2" connector

**POWER DRAIN :**

- Connect drain to meet local plumbing codes.
- Flexible connection to the drain should be removable for easy service and should not be permanent to prevent damages.

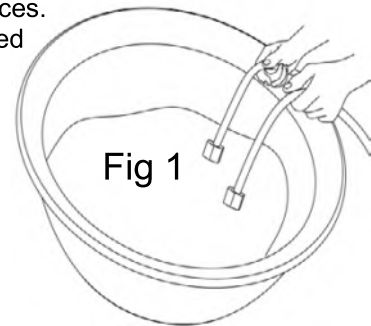


Installation**HOT AND COLD WATER SUPPLY LINES**

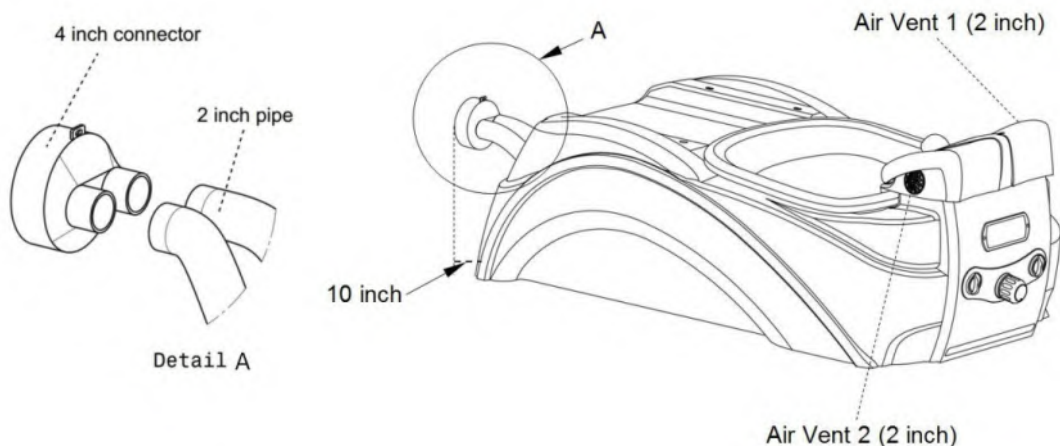
Carefully connect 1/2" ID supply hoses (not provided) to fresh water sources. Shut-off valves (not provided) should be utilized. Valves should be placed outside the tub for easy access.

New construction: Make sure to remove all debris from new hot cold water pipes before hooking up to spa by draining a good amount of water to a bucket. See Fig 1.

Replacement Spa: Always use new hot/cold water hoses when connecting a new spa chair to prevent debris, such as old rubber particles, from clogging water inlet system.

**VENTILATION SPA: (Optional)**

Connect Ventilation "detail A" to meet exhausted vent system building code



Specifications**ELECTRICAL AND PEDICURE SPA COMPONENT SPECIFICATIONS**

All electrical connections MUST be made by a licensed electrician in accordance with Local & National Electrical and Building Codes.

**WARNING:**

**IT IS EXTREMELY IMPORTANT THAT THE FOOT SPA OPERATES WITH GFCI PROTECTION
A 110V-50/60 Hz 15 Amp GFCI Must Be Utilized**

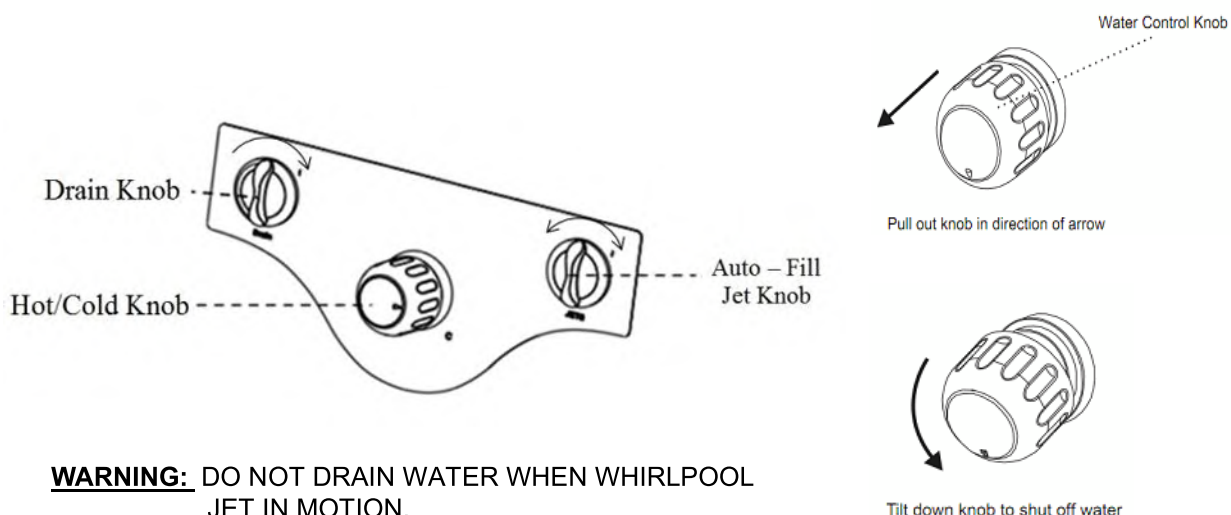
SPECIFICATIONS LIST ALL SPA WITH SAME DIMENSION IN A GROUP		
Spa Dimensions & Weights Prestige, Envision, Infinity, Luminous.	Spa (seat up-right): Spa (fully reclined): Empty Weight: Shipping Weight: Max. Handling Weight:	L=56"(142cm) W=31"(79cm) w/ Tray =47"(120cm) H=56"(142cm) L=76"(193cm) ~ 230 lbs. ~ 260 lbs. ~ 250 lbs.
Spa Dimensions & Weights Elite,	Spa (seat up-right): Spa (fully reclined): Empty Weight: Shipping Weight: Max. Handling Weight:	L=58"(147cm) W=31"(79cm) w/ Tray =47"(120cm) H=56"(142cm) L=78"(198cm) ~ 224 lbs. ~ 260 lbs. ~ 250 lbs.
Spa Dimensions & Weights Liberte, Versas.	Spa (seat up-right): Spa (fully reclined): Empty Weight: Shipping Weight: Max. Handling Weight	L=53"(134cm) W=31"(79cm) w/ Tray =47"(120cm) H=56"(142cm) L=68"(172cm) ~ 200 lbs. ~ 230 lbs. ~ 220 lbs.
Adjustable Stool	Pedicure Stool: Manicure Stool:	12"—13" 16.25"—20"
Spa Water Capacity	~ 4 US Gallon	
Jet Motor	120 VAC. At 85W 60Hz	
Massage, Motors, Seat Sliding & Reclining	24VDC, 2.5A x 5	
Discharge Pump	Motor —120V at 85W 60 Hz Maximum vertical lift: 3ft . Flow rate 400 GPH @ floor level	
Power source	115 VAC, 60HZ, 15A. Power needed per spa chair = 6 Amp	
Electrical Switches	One (1) electro-mechanical knob for the Whirlpool. Rated at 5A contact. One (1) electro-mechanical knob for the Drain. Rated at 5A contact.	
Safety	Pedicure Spa is UL Listed.	

Operation & Care

AUTO OPERATION Auto-Fill™ Models (Refer To Page 16 For Manual Operation):

- 1.1 Use faucet knob to adjust optimal water temperature at “H” or “C” directory.
- 1.2 Pull out and tilt down faucet knob to shut off water as needed or when spa chair is left unattended and overnight.

❖ Auto-Fill™ option can be simply reset to normal manual mode as a contingent system when automatic operation becomes unavailable. Please call our Customer care for instructions.



WARNING: DO NOT DRAIN WATER WHEN WHIRLPOOL JET IN MOTION.

Auto-Fill™ / Jet Switch: (Dual-functional momentary switch located on the right side of the front panel)

1. **To turn water on:** Turn knob clockwise and release. Water will fill up to reach the sensor level and activate the whirlpool jet. Water sensor is located behind the basin.
2. **To turn water off:** Turn knob clockwise and release to turn off water. The switch can be activated to turn on or turn off water any time during the Auto-Fill™ cycle,

NOTE: Activate this Auto-Fill™/Jet Knob

1. When Whirlpool Jet is running, system will resume with turn off Jet
2. When water is full and Jet is off, system will resume with fill up water for 3sec and Jet turns on.

Drain Switch:

(Dual Action Electro-mechanical Switch located on the left side of the front panel)

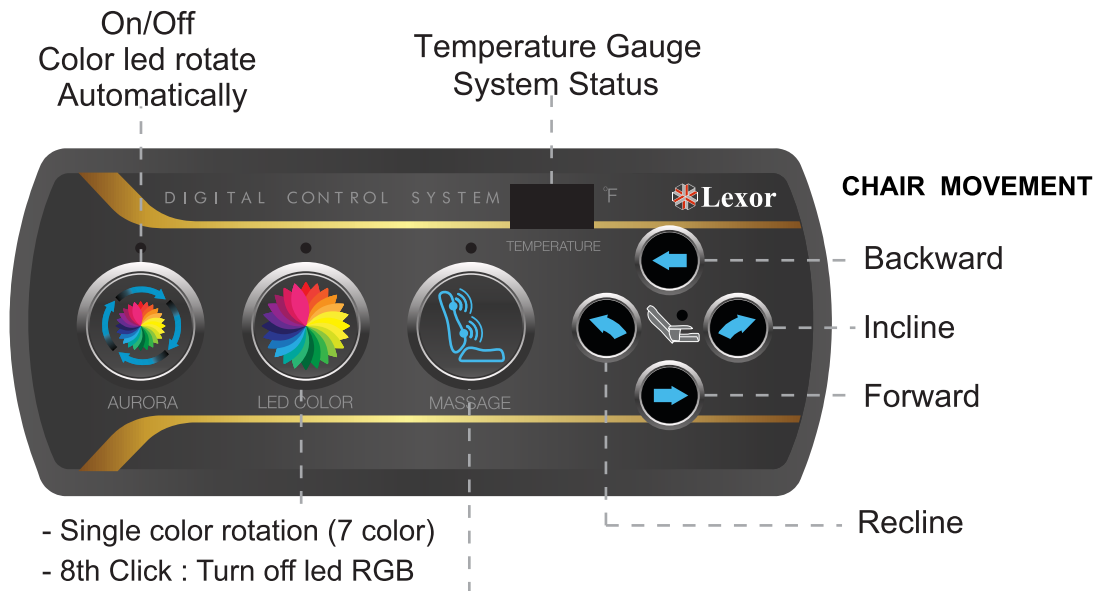
When activating this switch, it will raise the drain-stopper and power up the drain pump (if exist) at the same time.

1. **To drain water:** Turn the drain knob clockwise. Drain pump is activated.
2. **To turn off the drain pump:** Turn the drain knob counterclockwise.

CAUTION: Reset the Drain knob to vertical position to close the drain stopper prior to filling up water

Operation & Care

DCS Front Panel Functional & Operating Instructions: DIGITAL CONTROL SYSTEM



Resetting the water sensor level. (Empty basin prior to activating this mode)

Reset water sensor is required when the water level is out of range.



** Note :

- Click should be pressed slowly.
- Press and hold the AURORA™ Button for 3 sec to resume system operation or the system will be automatically resumed if no action taken in 20 sec .

Operation & Care**MANUAL OPERATION (For Non Auto-Fill™ /Drain Models):****Filling**

Close the Drain Stopper by turning the Drain Knob counterclockwise. Utilizing the single lever hot/cold mixer faucet located on the front of the Pedicure Spa, fill the tub to the water level above the whirlpool jet at least 1 inch. You must completely submerge the jet. If during the operation of the whirlpool, the water level decreases, simply add more water.

Whirlpool Starting

Turn the Jet Knob located on the right side of the front panel to clockwise to turn on. Turn counterclockwise to shut off

**Warning**

Do NOT turn "ON" The WHIRLPOOL JET unless adequate water is in the tub

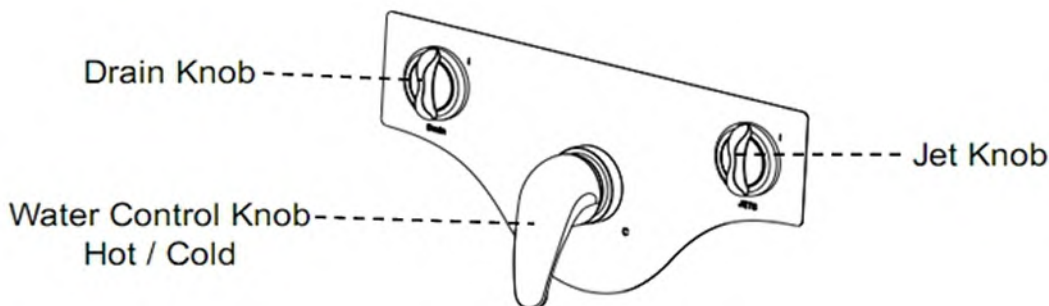
Draining

Turn the Drain Knob clockwise to open the Drain Stopper.
Power Drain will turn on automatically if drain pump exist.

**Warning**

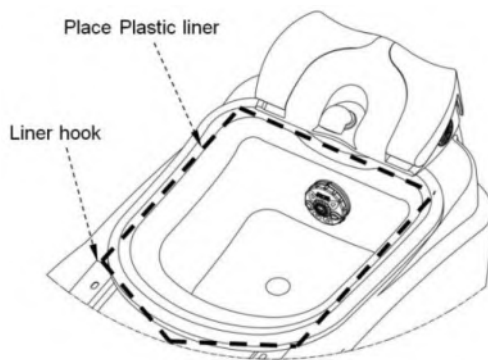
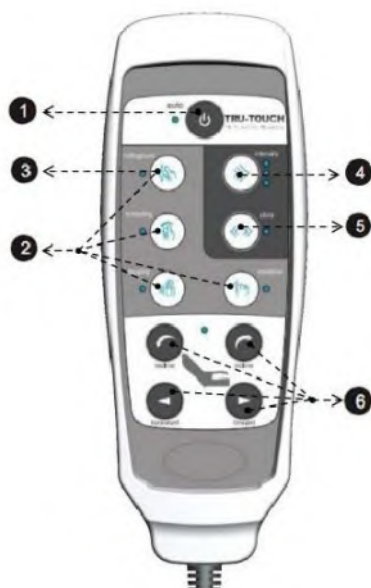
Do NOT turn "ON" The DRAIN PUMP unless adequate water is in the tub
THE WARRANTY IS VOID IF THE PUMP HAS BEEN RUNNING DRY

NOTE: Whirlpool action can cause even small amounts of soap or body oil to foam excessively.
For this reason, refrain from using these products during the whirlpool cycle



Operation & Care**MAGNETIC WHIRLPOOL JET VERSION:**

Turn Counterclockwise to remove Cap cover
Turn Clockwise to Close Cap Cover

AUTOFILL SYSTEM USING PLASTIC LINER**FOOT-REST CALF SUPPORT****MASSAGE SYSTEM & REMOTE CONTROLLER**

1. Press Auto Button to start Auto mode. Press again to turn off massage. Auto and Manual mode will run for duration of 15min.
2. Press any button (Rolling/Spot, Kneading, Tapping, Combine) to enter Manual mode.
3. Press Rolling/Spot to stop rolling up/down and stop at desired spot.
4. Press Intensity button to select tapping intensity.
5. Vibro Button/LED is an option. Pressing this button will resume with Tapping action.
6. Press any chair button (Recline, Incline, Backward, Forward) to move the chair to desired positions.

Operation & Care**WARNING**

You must always refer to your state or local guidelines for cleaning requirements. Overnight soaking with overdosed Chlorine may damage rubber part in basin

CLEANING PROCEDURE IS REQUIRED BY STATE BOARDS

*Note: *** A cleaning log should be kept with each pedicure spa ****

Each State will have slight differences in cleaning policies, please check with your state's Bureau of Barbering and Cosmetology or Regulatory Authority for specific details.

Safety Requirements for Pedicure Spas

The Bureau of Barbering and Cosmetology requires that salons using whirlpool pedicure foot spas must follow these disinfecting procedures to ensure proper cleaning and maintenance of the equipment and to prevent the spread of bacterial or parasitic disease.

Violation of this section may result on an administrative fine and/or disciplinary action. Each foot spa that is not in compliance with this section may result in a separate violation.

NOTE: Authority cited: Section 7312, Business and Profession Code. Reference: Section 7312 (e), Business and Profession Code.

Below is a suggestion for your pedicure spa chair's cleaning procedure:

After Each Customer

1. All water shall be drained and all debris shall be removed from the spa basin.
2. The spa basin must be cleaned with soap or detergent and water
3. The spa basin must be disinfected with an EPA-registered disinfectant with demonstrated bactericidal, fungicidal, and virucidal activity, which must be used according to manufacturer's instructions.
4. The spa basin must be wiped dry with a clean towel.

At the End of Each Day

1. The screen shall be removed, all debris trapped behind the screen shall be removed, and the screen and the inlet shall be washed with soap or detergent and water.
2. Before replacing the screen, the screen shall be totally immersed in an EPA-registered disinfectant with demonstrated bactericidal, fungicidal and virucidal activity, which must be used according to the manufacturer's instructions.
3. The spa system shall be flushed with low sudsing soap and warm for at least 10 minutes, after which the spa shall be rinsed and drained.

At Least Once A Week

1. The spa basin shall be filled completely with warm water and 1 teaspoon of 5.25% bleach for each gallon of water, or a solution of Sodium Hypochlorite of approximately 50ppm used according to manufacturer's instructions.
2. The spa system shall be flushed with the bleach and water solution, or Sodium Hypochlorite solution, for 5-10 minutes and allowed to sit for 6-10 hours.
3. The spa system shall be drained and flushed with water before use upon a patron.



Limited Warranty

To validate the Limited Warranty, The Registration Form must be filled out and signed Online, or on the form below, to confirm your knowledge on this Warranty Terms & Conditions within 15 days from Received Date.

Please return forms to:

Lexor, Inc.
Limited Warranty Registration Division
14800 Goldenwest St., Westminster, CA92683

Term Commencement:

Limited warranty term commences on date product is received by the customer.

2-Year Parts Exchange Limited Warranty:

All parts for pedi-spa model: Prestige, Envision, Elite, Luminous, Infinity, Liberte, and Versas.

1-Year Parts Exchange Limited Warranty:

All parts for Mani/Pedi Stools, and Customer Chairs.

Part Shipping Fee:

Shipping costs for replacement parts are covered under this Limited Warranty. To continue Warranty, Salon Owners have Fifteen (15) days to return defective parts to Lexor, Inc. at Salon Owner's expense prior to the next service.

Partial Terms and Conditions of Limited Warranty:

Wear and tear, physical damage, abuse, misuse, accidental events, freight damages, and Furniture lines are not included.

Replacement parts are supplied with instructions and specially designed for simple installation; therefore, do not require a technician onsite.

Customer phone support is not available on Thanksgiving, Christmas, New Years, Chinese New Year's, and Independence Day.

Transportation Damages:

Transportation damages must be claimed within Forty-Eight (48) hours after receiving the products by contacting customer support at Lexor. An investigation by the carrier can take up to 4-6 weeks to resolve.

Individual Parts Sold Warranty:

All purchased parts will be covered for 90-Days only.

Complete Top Chair w/ Massage will be covered for 6-Months limited warranty.

Complete Spa Base with Plumbing installed will be covered for 6-Months limited warranty.

Warranty Disclaimer:

Lexor shall have no obligation to repair, replace, or refund until the verification process is completed. This Limited Warranty applies only to Lexor Pedicure Spas utilized in the United States. This Limited Warranty is not transferable. Furthermore, this Limited Warranty is void if products are removed from its place of initial shipment as provided for in the invoice. This Limited Warranty is not valid on Clearance Items, items sold "As-Is", and all pedi-spa models before 2018.

Continuing a policy of constant research and development to improve the quality of our products, Lexor, Inc. reserves the right to change pricing, parts, design and specifications without prior notice or obligation.

UL US & CANADA CERTIFICATIONS

QMTX.E319402
Plumbing Accessories

LEXOR INC E319402

14800 GOLDENWEST ST

WESTMINSTER, CA 92683-4933 USA

Pedicure Spa, Model(s) Prestige

Pedicure spas, Model(s) Elite, Infinity

Pedicure spas, additionally classified in accordance with the water retention requirements of ASME/ANSI A112.19.7M-2006, Model(s) Ambience, Elite Platinum, Elite Ultra, Envision, Essencia, Liberte, Luminous, Magna, Mystique, Q-Spa, Spa 100, Spa 200, Spa 300, PSD 400-xxx, Stellar, Ultima, Utopia, V-Spa, Versas, Vigor, Vista

QMTX7.E319402
Plumbing Accessories Certified for Canada

LEXOR INC E319402

14800 GOLDENWEST ST

WESTMINSTER, CA 92683-4933 USA

Pedicure Spa, Model(s) Prestige

Pedicure Spa, Model(s) Prestige

Pedicure spas, additionally classified in accordance with the water retention requirements of ASME/ANSI A112.19.7M-2006, Model(s) Ambience, Elite Platinum, Elite Ultra, Envision, Essencia, Liberte, Luminous, Magna, Mystique, Q-Spa, Spa 100, Spa 200, Spa 300, PSD 400-xxx, Stellar, Ultima, Utopia, V-Spa, Versas, Vigor, Vista

IAPMO RESEARCH AND TESTING, INC.

5001 East Philadelphia Street, Ontario, California 91761-2816 • (909) 472-4100 Fax (909) 472-4244 • www.iapmo.org



CERTIFICATE OF LISTING

IAPMO Research and Testing, Inc. is a product certification body which tests and inspects samples taken from the supplier's stock or from the market or a combination of both to verify compliance to the requirements of applicable codes and standards. This activity is coupled with periodic surveillance of the supplier's factory and warehouses as well as the assessment of the supplier's Quality Assurance System. This listing is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO Research and Testing, Inc. of the product acceptance by Authorities Having Jurisdiction.

The most updated information on this Certificate of Listing is available online at pld.iapmo.org

Effective Date: July 2016 (To be renewed annually)

Product: Pedicure Fixture

Issued To: Lexor Inc
14800 Golden West St.
Westminster, CA 92683

Identification: Product shall be permanently and legibly marked with manufacturer's name or trademark, and model number. Product shall also bear the UPC® certification mark. Markings shall be applied so as to be visible after installation.

Characteristics: Pedicure Fixture consists of a foot tub fixture that may be equipped with components such as supply fittings, waste fittings, with or without a chair, and/or jet(s) and suction fitting(s) to circulate water. To be installed in accordance with the manufacturer's instructions and the latest edition of the Uniform Plumbing Code.

Products listed on this certificate have been tested by an IAPMO R&T recognized laboratory. This recognition has been granted based upon the laboratory's compliance to the applicable requirements of ISO/IEC 17025.

Products are in compliance with the following standard(s):

IAPMO IGC 281-2015a


Chairman, Product Certification Committee


CEO, The IAPMO Group



This listing period is based upon the last date of the month indicated on the Effective Date and Void After Date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of the Product Certification Committee, or any evidence of non-compliance with applicable codes and standards or of inferior workmanship, may be deemed sufficient cause for revocation of this listing. Production of or reference to this form for advertising purposes may be made only by specific written permission of IAPMO Research and Testing, Inc. Any alteration of this certificate could be grounds for revocation of the listing.



EUROPEAN INSPECTION AND CERTIFICATION COMPANY S.A.

CERTIFICATE OF CONFORMITY

FULLNESS EXAMINATION OF TECHNICAL FILE

Certificate No. : EMC.0025
 Issue Date : 23/05/2016
 Applicant : LAC LONG CO., LTD.
 (Name & Address) Lot Q4, 8th Street, Long Hau Industrial Park,
 Long Hau Ward, Can Giuoc District, Long An Province, Vietnam
 Manufacturer : Same as applicant
 (Name & Address)
 Test Report Nos. : E16032004
 Product Description : SPA CHAIR
 Model(s) : Luminous Spa, Infinity Spa, Elite Spa, Mystique Spa, Envision Spa,
 Liberte Spa, Ultima Spa, European touch Spa 100, European touch
 Spa 200, European touch Spa 300
 Directive(s) : Electromagnetic Compatibility Directive 2004/108/EC
 Standard(s) : EN 55014-1:2006/A2:2011, EN 55014-2:1997/A2:2008

This is to attest that, upon the relevant request of the applicant, EUROCERT as Third Party Authority has reviewed the Technical Construction File of the described product which found to fulfill the basic health and safety prerequisites of above mentioned Directive(s).

Note:

- The manufacturer should issue a EC Declaration of Conformity according to the basic requirements of the applicable and relevant EC directives.
- The holder of the certificate shall use it in connection with the EC declaration of conformity.
- The CE marking can be affixed on the above mentioned product with the manufacturer's responsibility, if all relevant and applicable EC directives are complied with.
- All modifications to the Technical File should be first submitted to the Third Party Inspection Authority to ensure further validity of this attestation.
- This certificate is valid only for the product and configuration described above.



Third Party Authority Stamp

On Behalf of EUROCERT

George N. Sifonios
Director of Development

89, CHLOIS STR. & LIKOVRISEOS, 144 52 METAMORFOSI, ATHENS, GREECE
 Tel.: ++30 210 62.52.495, 30 210 62.53.927 - Fax: ++30 210 62.03.018
 Internet site: www.eurocert.gr - e-mail: eurocert@otenet.gr





**OUR PEDI-SPAS ARE
GUARANTEED SAFEST
IN THE INDUSTRY**



INDUSTRY'S BEST CUSTOMER SERVICE

Lexor offers the industry's leading **CUSTOMER CARE SUPPORT** which is available to answer your phone call **24 hrs. a day, 7 days a week**. You can also submit a request online any time at www.lexor.com.

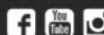


Customer Care Team

14800 GOLDENWEST ST.,
WESTMINSTER, CA 92683

Support Toll Free:
800.559.3630

866.PEDI-SPA
www.lexor.com



KEYWORD:
lexorpedispa

LEXOR HEADQUARTERS

WESTMINSTER, CA 14800 Goldenwest St., Westminister, CA 92683

SHOWROOMS & SERVICE CENTERS

ATLANTA, GA

4500 Satellite Blvd., Ste. 1130
Duluth, GA 30096

BALTIMORE, MD

3101 Washington Blvd.
Baltimore, MD 21230

BOSTON, MA

1411 Dorchester Ave., Flr. 1, Ste. 1
Dorchester, MA 02122

CHICAGO, IL

4928 N. Broadway, Ste. 101
Chicago, IL 60640

DALLAS, TX

9780 Walnut St., Ste. 394
Dallas, TX 75243

FALLS CHURCH, VA

7252 Arlington Blvd.
Falls Church, VA 22042

HOUSTON, TX

11209 Bellaire Blvd., Ste. C-18
Houston, TX 77072

ORLANDO, FL

1525 E. Colonial Dr., Ste. 2
Orlando, FL 32803

PHOENIX, AZ

3611 N. 35th Ave.
Phoenix, AZ 85017

PORTLAND, OR

8001 S.E. Powell Blvd., Ste. D
Portland, OR 97206

SAN JOSE, CA

979 Story Rd., Ste. 7090
San Jose, CA 95122

SEATTLE, WA

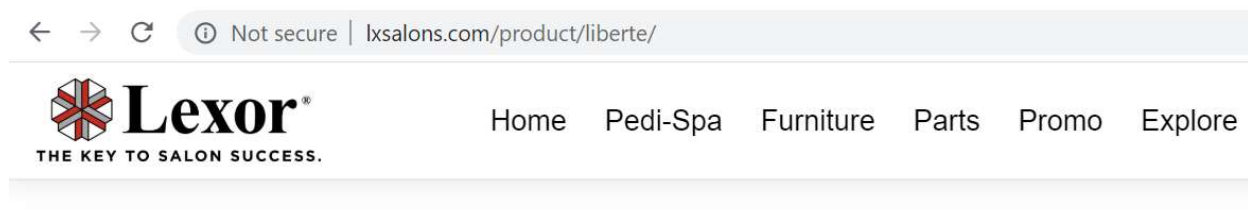
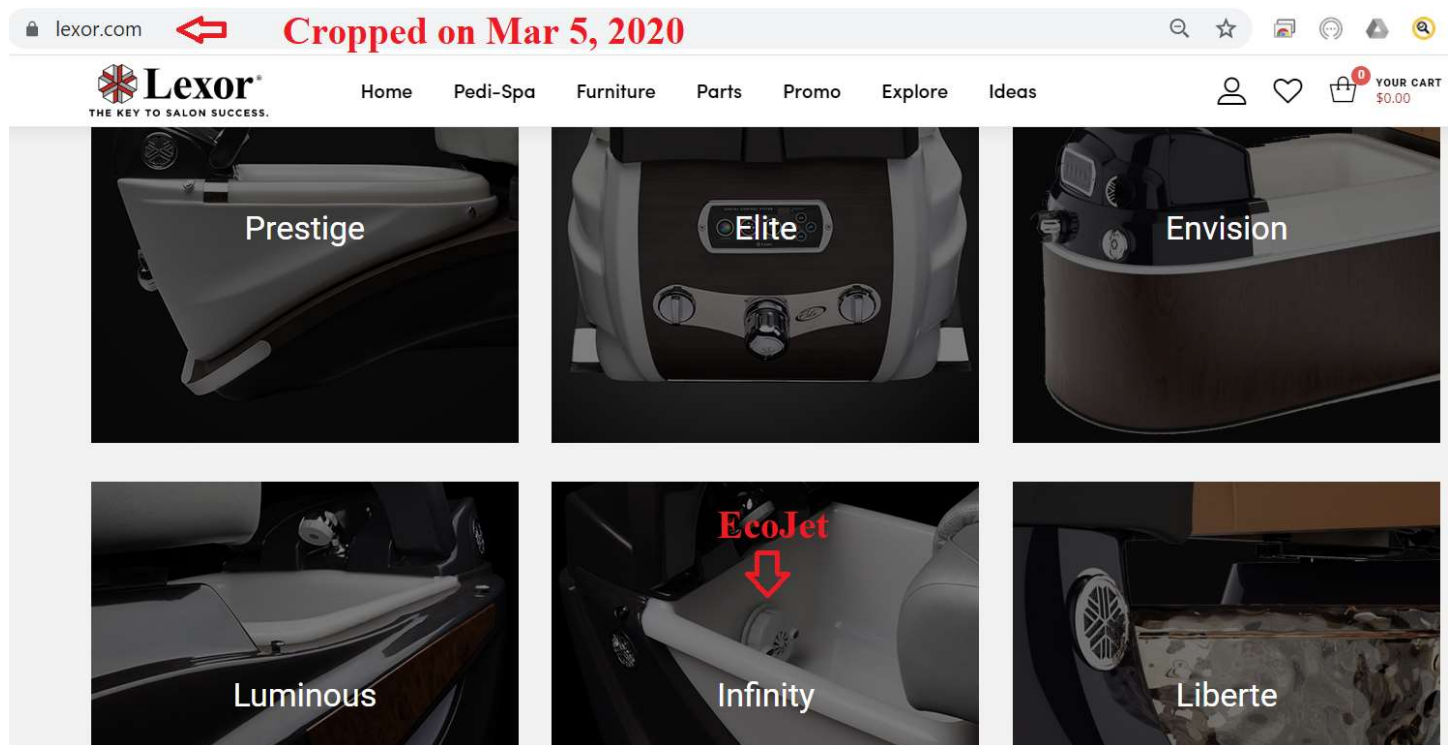
1043 S. Jackson St., Ste. 101C
Seattle, WA 98104

ONTARIO, CANADA

90 Wings Rd., Ste. 23
Woodbridge, ON L4L 6A9

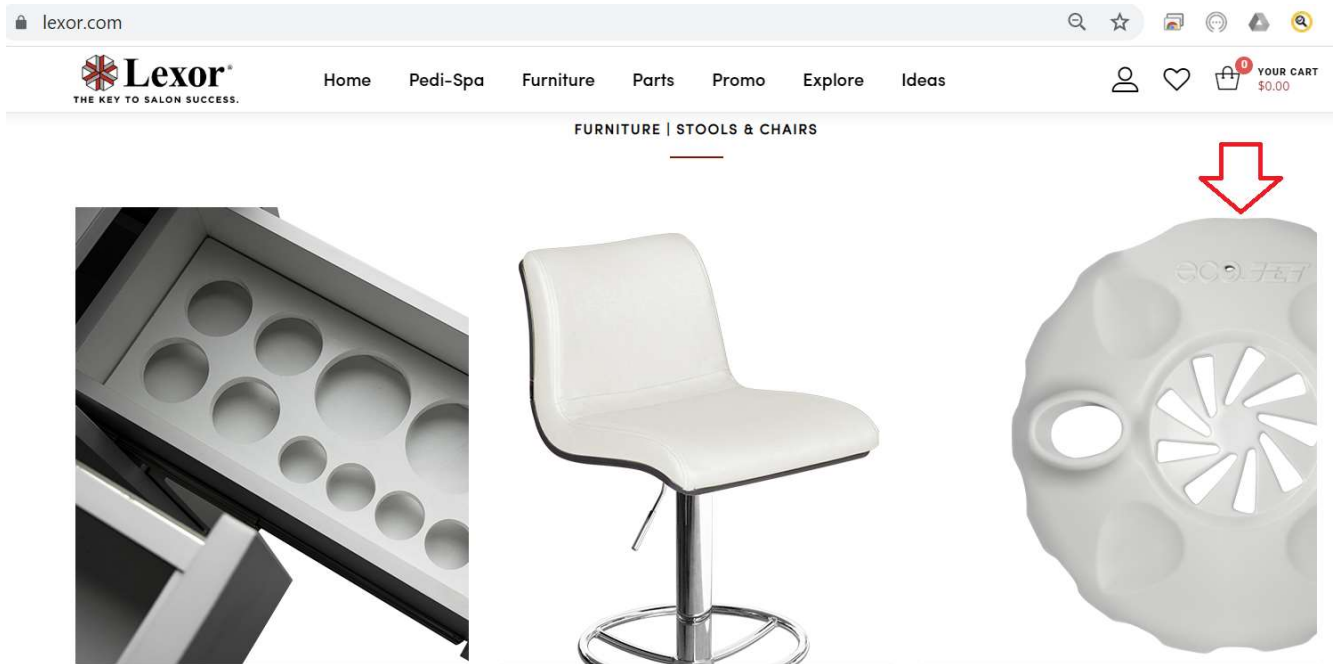
Lexor Pedicure Spas Models that are using EcoJet Pump

Source: Lexor.com



Smart Features





1. Prestige model



https://www.youtube.com/watch?time_continue=26&v=kuwENge4QyU (Second 20 shows EcoJet)

Home | youtube.com/watch?v=kuwENge4QyU

ame... | YouTube | Google Translate - Google S... | Facebook | Google Translate - Google S... | Gmail | YouTube

Search | Download this video

ECOJET™ Magnetic Drive

0:20 / 0:30

Lexor Pedi-Spa: 2017 Prestige™

Unlisted

20,736 views • Apr 11, 2017

1 Like | 1 Dislike | SHARE | SAVE

Lexor PediSpa
2 subscribers

SUBSCRIBE

(Cropped on Oct 19, 2020)

2. Model Elite



https://www.youtube.com/watch?time_continue=4&v=j3YRg7n8_Pc (Second 19 shows EcoJet)

Home | youtube.com/watch?v=j3YRg7n8_Pc

ameese... | YouTube | translate - Google S... | Facebook | translate - Google S... | Gmail | YouTube

ibe | Search | Download this video

ECOJET™ Magnetic Jet

Lexor Pedi-Spa: 2017 Elite™

Unlisted

9,142 views • Apr 11, 2017

0 | 0 | SHARE | SAVE | ...

(Cropped on Oct 19, 2020)

3. Model Luminous




https://www.youtube.com/watch?v=CecFs_NzwbY (Second 22 mentions EcoJet)

youtube.com/watch?v=CecFs_NzwbY

- Vietnamese... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube

YouTube Search Download this video



Lexor Commercial 2018 : Luminous wV01

268 views • Oct 19, 2018

0 0 SHARE SAVE ...

(Cropped on Oct 19, 2020)

4. Model infinity



<https://www.youtube.com/watch?v=nkHkzVH4fB0> (Second 21 shows Newer Version Of EcoJet)

youtube.com/watch?v=nkHkzVH4fB0

t - Vietnamese... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube

Download this video

YouTube Search

UNIVERSAL ECOJET™

INFINITY

0:21 / 0:30

Lexor Commercial 2018 : Infinity wVO2

348 views • Oct 19, 2018

0 0 SHARE SAVE ...

ASIAN WORLD MEDIA OFFICIAL

SUBSCRIBE

(Cropped on Oct 19, 2020)

5. Model Envision



<https://www.youtube.com/watch?v=MZzoUj42Zow> (Second 13 shows EcoJet)



(Cropped on Oct 19, 2020)

6. Liberte model



Not secure | lexorcanada.com/product/liberte/

amese... YouTube translate - Google S... Facebook translate - Google S... Gmail YouTube My T-Mobile Onlin... USPTO - Search for...

Lexor®
Smart Pedi-Spa. Smart Choice.

PEDICURE SPA FURNITURE ACCESSORIES SPA PARTS CONTACT

LIBERTE Home / Pedicure Spa / Liberte

Liberte

Inspired by all that is contemporary, the new Liberte's sleek curves devolve back to a simplistic form to emphasize the opulent and decadent spa basin that started it all. To add a modern splash in the design, the magnificent spa basin is re-imagined with a bold pattern and lavish color, which is the focus of the Pedi-Spa in its origin. Find Beauty in the Basics.

Category: Pedicure Spa



(Cropped on Oct 19, 2020)



PEDICURE SPA FURNITURE ACCESSORIES SPA PARTS CONTACT

Description

Description

For those salons that are constantly pushing the boundaries of class and elegance, Lexor presents: The Liberte™. Keep your clients in awe as they partake in this limitless experience. From the luxurious and high-performing Ultraleather™, to the elegant wood trim to the glowing Aurora LED Color-Changing Bowl, the Liberte™ boasts exclusive stature that only others dream of.

Smart Features:

- EcoJet™ Magnetic Drive (Patent no: RE45844)
- EcoJet™ Disposable Liner
- Tru-Touch™ Shiatsu Massage System (tapping, kneading, rolling, etc.)
- Adjustable Footrest for Comfort


Additional Features:

- 1-Year Limited Warranty
- Includes Classic Curve Pedicure Stool (matching cushion color and adjustable height)
- Supple Leather Cushion
- Fully Functioning Power Seats
- Remote Control (controls seats and massage system)
- Construction: Marble Composite, High Gloss, Acetone-proof Gel Coat
- Foldable Manicure Trays with Removable Cup Holders
- Lift-up Armrest for Easy Access
- Purse/Handbag Hook
- Crystal Bowl


Cropped on Oct 19, 2020

Lexor.com – Lexor® – The Key to x


lexor.com





HomePedi-SpaFurnitureP




Lexor®
THE KEY TO SALON SUCCESS.

 7400 Hazard Avenue
Westminster, CA 92683

 (888) 479-6916

 info@lexor.com

 HQ Office: M-F (8:00 am - 5:00 pm)
24/7 Customer Service Call Center

ABOUT US

[About Lexor](#)
[Contact Us](#)
[Showrooms](#)
[Terms & Condition](#)
[Privacy Policy](#)

CERTIFICATE OF COMPLIANCE

Certificate Number 20160504-E319402
Report Reference E319402-20130425
Issue Date 2016-MAY-04

Issued to: LEXOR INC
14800 GOLDENWEST ST,
WESTMINSTER CA 92683-4933

**This is to certify that
representative samples of**

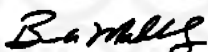
COMPONENT - PLUMBING ACCESSORIES
USR: Component - Pedicure Spa Pump / Jet Assembly,
Models Pureflo 7, EcoJet-MD, and UniJet.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: Standard for Electric Plumbing Accessories, ANSI/UL 1951
Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



Screencaps From Ecojet, Inc. Website

[HOME](#)[PRODUCTS](#)[CONTACT INFO](#)[FIND DEALERS](#)[SUPPORT](#)

Universal Whirlpool Magnetic Jet System

(Designed for Pedicure Spa Chairs).

The Ecojet Magnetic Drive Jet takes "sanitary" to the next level. This jet system is highly efficient and reliable. With a one-year warranty. Ecojet U.S. recognized, assembled & tested in the USA.

This kit is designed with advanced technology that increases the product longevity and durability. Our goal is to create the best performing whirlpool jet among competitors and most spa chairs in the market is now coming with universal fitment. The Ecojet Magnetic Drive Jet is now comes with universal fitment that fits most magnetic jets cutout for the Ecojet Universal Adapter is 3.5 inches. Any larger opening will have leakages (Please reference manual for further instructions).

The Ecojet MD package Includes:

- Ecojet® MD Magnetic Motor
- Replacement Bushing Kit
- Motor Mounting Lever
- Motor Housing Gasket
- Motor Housing
- Impeller Housing
- Magnetic Impeller
- Ecojet® Cap Cover
- AC Power Cord

[Home](#)[About Us](#)[Find Dealers](#)[Terms & Conditions](#)[Get in touch with us →](#)

[HOME](#) [PRODUCTS](#) [CONTACT INFO](#) [FIND DEALERS](#) [SUPPORT](#)

Universal Magnetic Wet-End

The Ecojet Magnetic Wet-End brings sanitary in a whole new level. This wet-end is highly durable and reliable. This magnetic drive jet is UL recognized, Utilities Patented (8,272,079) and U.S. Patent No. RE46,655. This magnetic jet is assembled and tested in the U.S.A.

[Home](#)[About Us](#)[Find Dealers](#)[Terms & Conditions](#)[Get in touch with us →](#)



HOME PRODUCTS CONTACT INFO FIND DEALERS SUPPORT

EcoJet Impeller

The EcoJet Impeller



Images of Third-Party Sales of Accused Products

Ecojet Universal 3.5 Shafted

← → ↻ spasalon.us/spa-parts/eco-magnetic-jet-new.html 🔍 ☆

SpaSalon.us wholesale Search products 🔍 » advanced search Call 1.888.400. mon - fri: 9am - 5pm

PEDICURE CHAIRS ▾ NAIL ▾ HAIR ▾ SPA ▾ DECOR ▾ PARTS ▾ SUPPLIES ▾ ▶ 1/2 🛒 Cart ▾ 👤 Account

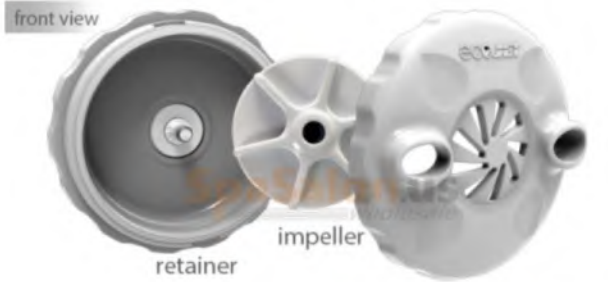
Home / Spa Parts / ECO magnetic jet - new

ECO magnetic jet - new

★★★★★ 5 reviews [Write a review](#)

ECO magnetic jet
Option - new (cover + impeller + retainer)

front view



retainer impeller

back view

Option : *
new wet end (fit new dry motor) ▾

make your selection, price will show

Faster shipping : *
- select - ▾

Price in points 🌐 : 5650 points

CODE: ssu-psd-lx-ECO

FREE SHIPPING
continental US only

~~\$89.00~~
\$56.50
You save: \$32.50

Wholesale:	
Quantity	Price
2+	\$56.00
3+	\$55.83
4+	\$55.75
5+	\$55.70
6+	\$55.33
7+	\$55.21
8+	\$55.13
9+	\$55.06
10+	\$55.00

1 + - 🛒 Add to Cart

♥ Add to wish list 📊 Compare

Ecojet Universal 3.5 Shafted (with Motor and Mounting Housing)

spasalon.us/spa-parts/eco-magnetic-jet-new.html

SpaSalon.us wholesale

Search products » advanced search

1.888.400.6 mon - fri: 9am - 8p

PEDICURE CHAIRS ▾ NAIL ▾ HAIR ▾ SPA ▾ DECOR ▾ PARTS ▾ SUPPLIES ▾ 1/2

Cart ▾ Account ▾


Home / Spa Parts / ECO magnetic jet - new

ECO magnetic jet - new

★★★★★ 5 reviews [Write a review](#)

CODE: ssu-psd-lx-ECOJ

ECO magnetic jet
Option - new (wet cover + dry motor)



Option : *

- select -

make your selection, price will show

Faster shipping : *

- select -

Price in points ⓘ : 5650 points

Wholesale:

Quantity	Price
2+	\$56.00
3+	\$55.83
4+	\$55.75
5+	\$55.70
6+	\$55.33
7+	\$55.21
8+	\$55.13
9+	\$55.06
10+	\$55.00

\$89.00
\$56.50
You save: \$32.50

FREE SHIPPING
continental US only

1

[Add to wish list](#) [Compare](#)

Ecojet Universal 3.5 Shafted (with Motor and Mounting Housing)

ppsdepot.com/shop/-ECO-Ecojet-Magnetic-jet-motor-using-disposable-liner-for-Pedicure-chair-New/c-p1223

Call Us: (714) 798-2009

My cart (0) item [Check out](#)

[Login](#) [My account](#)

HOME PEDICURE SPA FURNITURE ACCESSORIES/PARTS NAIL/PEDICURE SUPPLY PROMOTIONS

Home » Accessories/Parts » Tub Accessories » Whirlpool Jets & Parts

Categories

[Expand All](#) | [Collapse All](#)

Pedicure Spa (19)

- Pedicure Chairs (13)
- Pedicure Chairs For Kids (6)
- Spa Pedicure Benches

Furniture (382)

- Massage Chairs (3)
- Salon Furniture (303)
- Dryer Station (37)
- Guest Chair (38)
- Manicure chair (high) (21)
- Nail Polish Display (26)
- Nail Table (42)
- Pedi Cart (13)
- Pedicure stool (low) (56)
- Reception Desk (44)

FREE SHIPPING

ECOJET magnetic drive jet

option - new (wet cover + dry motor)

ECO ECOJET MAGNETIC JET MOTOR USING DISPOSABLE LINER FOR PEDICURE CHAIR (NEW)

FREE SHIPPING

\$149.99

In Stock Quantity [Add to Cart](#)

[Write a review](#)

[Like](#) [Sign Up to see what your friends like.](#)

[Save](#)



Ecojet MD 3.0 Shafted (with Motor and Mounting Housing)

← → ↻ spasalon.us/spa-parts/eco-magnetic-jet-new.html 🔍 ☆

SpaSalon.us wholesale

Search products 🔍 » advanced search

Call Us 1.888.400.1111 mon - fri: 9am - 8pm

PEDICURE CHAIRS ▾ NAIL ▾ HAIR ▾ SPA ▾ DECOR ▾ PARTS ▾ SUPPLIES ▾ 1/2

🛒 Cart ▾ 👤 Account


Home / Spa Parts / ECO magnetic jet - new

ECO magnetic jet - new

★★★★★ 5 reviews Write a review

CODE: ssu-psd-lx-ECOJ

ECO magnetic jet
Option - old (wet cover + dry motor)



Option : *
old (wet end + dry motor) (+\$80.50) ▾

make your selection, price will show

🔍 🔄 🔄 🔄 🔄 🔄 🔄

Faster shipping : *
- select - ▾

Price in points ⓘ : 13700 points

Wholesale:

Quantity	Price
2+	\$136.50
3+	\$136.33
4+	\$136.25
5+	\$136.20
6+	\$135.83
7+	\$135.71
8+	\$135.63
9+	\$135.56
10+	\$135.50

1 + - 🛒 Add to Cart

♥ Add to wish list 📊 Compare

FREE SHIPPING
continental US only

~~\$169.50~~
\$137.00
You save: \$32.50

Ecojet MD 3.0 Shafted (with Motor and Mounting Housing)


← → ↻ ebuynails.com/shop/ecojet-magnetic-drive-jet-kit/ ☆ 🗑

Number One Nails Wholesale Coupon Code Login

BUY NAILS
eco & easy way to build the salon

Search... 🔍 Phone: (850)588-1838
"Call now to get best deals" 🛒

≡ SHOP BY CATEGORY Home All Best Deals Best Selling Massage Chairs Nail Tables News



HOME / JET


Ecojet Magnetic Drive Jet Kit


~~\$199.00~~ **\$165.00**


- 1 + **ADD TO CART**


Category: Jet

📱 🐦 📧 📌 📺

 **MATCH PRICE PROMISE**
Take advantage of our offer.

 **BUYER PROTECTION**
Shop with your confidence!

 **AFTER SALES SERVICE**
We're here to support.

 **FAST SHIPPING**
Get delivered nextday!

Ecojet MD 3.0 Shafted (with Motor and Mounting Housing)

ppsdepot.com/shop/-ECO-Magnetic-jet-3-fit-Small-hole-OLD-STYLE/c-p940

Call Us: (714) 798-2009

My cart (0) item [Check](#)

search item keyword [GO](#)

Login My acco

HOME PEDICURE SPA FURNITURE ACCESSORIES/PARTS NAIL/PEDICURE SUPPLY PROMOTION


Home » Promotions

Categories

[Expand All](#) | [Collapse All](#)

- Pedicure Spa (19)
 - Pedicure Chairs (13)
 - Pedicure Chairs For Kids (6)
 - Spa Pedicure Benches
- Furniture (382)
 - Massage Chairs (3)
 - Salon Furniture (303)
 - Dryer Station (37)
 - Guest Chair (38)
 - Manicure chair (high) (21)
 - Nail Polish Display (26)
 - Nail Table (42)
 - Pedi Cart (13)
 - Pedicure stool (low) (56)
 - Reception Desk (44)

FREE SHIPPING



ECO MAGNETIC JET 3" FIT SMALL HOLE OLD STYLE

FREE SHIPPING

\$154.99

In Stock Quantity [Add to Cart](#)

0.0 [Write a review](#)

[Like](#) Sign Up to see what your friends like.


[Save](#)

Ecojet MD 3.0 Shafted (with Motor and Mounting Housing)

← → ↻ 📄 pedicurespasuperstore.com/products/eco-magnetic-jet-motor 🔍 ☆




CALL US: 888-237-5168 | TEXT US: 714-910-5688

SHOP FAQ FINANCING REQUEST A QUOTE

 **PEDICURE SPA
SUPERSTORE**
WHERE THE PROFESSIONALS SHOP

ECO MAGNETIC JET MOTOR

\$195.95

SHARE   

NOT SURE IS THIS IS THE RIGHT PART FOR YOUR CHAIR? NEED SOME HELP?:

Choose one ▼

CONFIRMATION*:

☐ I CONFIRM THAT THIS IS COMPATIBLE WITH WHAT I NEED IT FOR AND THAT IN ALL CIRCUMSTANCES PARTS ARE NON-RETURNABLE AND NON-REFUNDABLE

FLAT RATE SHIPPING:

☐ 1 UNIT +\$25.95



DESCRIPTION FEATURES SPECIFICATIONS

Order Pedicure Chair Parts online for faster service. New and universal, with a 7-day grace period for returns in their original condition. No returns, refunds, or exchanges for main PC boards, AC/DC motors, discharge pumps, remote controls, or electrical components. 20% restocking fee and buyer responsible for shipping costs.

— 1 +

SHIPPING AND RETURNS +

ADD TO CART • \$195.95



Ecojet MD 3.0

← → ↻ beautyspaexpo.com/products/eco-magnetic-jet-wet-end

CALL: 888-904-5858 | TEXT: 714-696-8888

🔍 🌟


📱 📺 📷 📧 🎵

🔍

BEAUTY SPA EXPO

👤 🛒

PEDICURE CHAIRS PEDICURE CHAIR PARTS NAIL FURNITURE MASSAGE TABLES SALON EQUIPMENT SALON DECORATIONS PACKAGE DEALS FINANCING



Home /

Eco Magnetic Jet Wet End

\$65.95

Serial Number. If available, please enter:

Image of the Part. If available, please upload:

Choose File No file chosen

Image of the complete Pedicure Chair. If available, please upload:

Choose File No file chosen

Confirmation*:

☐ I confirm that this part is compatible with what I need it for and that in ALL circumstances parts are non-returnable and non-refundable

Flat Rate Shipping:

☐ 1 Unit +\$20.95


ADD TO CART

Ecojet MD 3.0

← → ↻ 📄 pedicurespasuperstore.com/products/eco-magnetic-jet-wet-end 🔍 ☆ 🗑




CALL US: 888-237-5168 | TEXT US: 714-910-5688

SHOP FAQ FINANCING REQUEST A QUOTE

 **PEDICURE SPA
SUPERSTORE**
WHERE THE PROFESSIONALS SHOP

ECO MAGNETIC JET WET END

\$65.95

SHARE   

NOT SURE IS THIS IS THE RIGHT PART FOR YOUR CHAIR? NEED SOME HELP?:

Choose one ▼

CONFIRMATION*:

☐ I CONFIRM THAT THIS IS COMPATIBLE WITH WHAT I NEED IT FOR AND THAT IN ALL CIRCUMSTANCES PARTS ARE NON-RETURNABLE AND NON-REFUNDABLE

FLAT RATE SHIPPING:

☐ 1 UNIT +\$20.95

DESCRIPTION FEATURES SPECIFICATIONS

Order Pedicure Chair Parts online for faster service. New and universal, with a 7-day grace period for returns in their original condition. No returns, refunds, or exchanges for main PC boards, AC/DC motors, discharge pumps, remote controls, or electrical components. 20% restocking fee and buyer responsible for shipping costs.

— 1 +


ADD TO CART • \$65.95

SHIPPING AND RETURNS +

BUYING BULK? REQUEST A QUOTE +

Ecojet MD 3.0

← → ↻ ppsdepot.com/shop/-OLD-style-ECO-jet-Front-Housing-Set-Lexor-Magnetic-Jet-Head-Pedicure-Spa-Chair/c-p1040 ☆ 🗑️ 👤 📦

**PROPEDISPA**

Call Us: (714) 798-2009

search item keyword

My cart 🛒 (0) item [Checkout](#)

[Login](#) [My account](#)

HOME PEDICURE SPA FURNITURE ACCESSORIES/PARTS NAIL/PEDICURE SUPPLY PROMOTIONS

Home » Promotions

Categories
Expand All | Collapse All

- Pedicure Spa (19)
 - » Pedicure Chairs (13)
 - » Pedicure Chairs For Kids (6)
 - » Spa Pedicure Benches
- Furniture (382)
 - » Massage Chairs (3)
 - » Salon Furniture (303)
 - » Dryer Station (37)
 - » Guest Chair (38)
 - » Manicure chair (high) (21)
 - » Nail Polish Display (26)
 - » Nail Table (42)
 - » Pedi Cart (13)
 - » Pedicure stool (low) (56)
 - » Reception Desk (44)



FREE SHIPPING

OLD STYLE ECO JET FRONT HOUSING SET LEXOR MAGNETIC JET HEAD PEDICURE SPA CHAIR

FREE SHIPPING

Reg. price: ~~\$59.99~~

On Sale: \$49.99

You Save 17 %

In Stock Quantity

★ ★ ★ ★ ★ 0.0

Sign Up to see what your friends like.

[Write a review](#)

Compilation of Accused Products

Ecojet MD 3.0 Shafted

[←](#) [→](#) [↺](#) [prospadepot.com/ecojet-front-housing-set.html](#) [🔍](#) [☆](#)


HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT ABOUT US FIND DEALERS


HOME / ECOJET FRONT HOUSING SET

Product Code: Ecojet Front Housing Set

ECOJET FRONT HOUSING SET

[Add to Wishlist](#) [Add to Compare](#) * Required Fields





DETAILS

Ecojet Replacement Magnetic Impeller Housing Set (3pcs. Kit).

The Ecojet Magnetic Impeller Housing set is a direct housing and impeller replacement for the Ecojet Magnetic Drive Jet Set. The set comes with cap cover, magnetic impeller, and the impeller housing.

Ecojet Impeller Housing contents:

Ecojet MD Cap Cover
Ecojet MD Magnetic Impeller
Ecojet MD Impeller Housing

Ecojet MD 3.0 Shafted (with motor and mounting housing)



ECOJET MD MAGNETIC JET INSTALLATION GUIDE

WARNING: PLEASE READ AND FOLLOW SAFETY INSTRUCTIONS BEFORE USING THE EQUIPMENT. ALWAYS UNPLUG THE EQUIPMENT BEFORE SERVICING TO REDUCE THE RISK OF ELECTRIC SHOCK AND/OR PERSONAL INJURY.

NOTE: Ecojet MD magnetic motor & components are assembled in alignment as illustrated below. Please follow step-by-step instructions. (Rev. 1.2)

Ecojet MD package contents:

- 1 Ecojet MD Magnetic Motor
(Part#: EMD-1001)
- 2 Motor Cap Lock-Nut
(Part#: EMD-2108)
- 3 Universal Adapter (1pc.)
(Part#: EMD-2107)
- 4 Motor Housing Gasket
(Part#: EMD-2106)
- 5 Motor Housing
(Part#: EMD-2105)
- 6 Impeller Housing
(Part#: EMD-2104)
- 7 Magnetic Impeller
(Part#: EMD-2103)
- 8 Ecojet Cap Cover
(Part#: EMD-2101)
- 9 AC Power Cord
(Part#: EMD-2109)



Ecojet Universal 3.5 Shafted


prospadepot.com/ecojet-magnetic-ii.html

Norred law Time Sh... Dashboard - MyCase

PSD™
Pedicure Spa & Salon Furniture Wholesaler

HOME PEDICURE SPA SALON FURNITURES ACCESSORIES SUPPORT

HOME / ACCESSORIES / WHIRLPOOL JET / ECOJET MAGNET DRIVE JET / ECOJET II MAGNETIC DRIVE



Product Code: Ecojet II Magnetic Drive
ECOJET II MAGNETIC DRIVE
Add to Wishlist Add to Compare
f t e + 1

DETAILS

Patented Ecojet II with Magnetic-Drive will provide a strong soothing whirlpool, easy to clean and extremely reliable. Use together with PSD Disposable Liner will bring sanitary pedicure service to a whole new level. The Ecojet Magnetic Drive Jet brings sanitary in a whole new level. This jet system is highly efficient and reliable. We back our motor with a two-year warranty. This magnetic drive jet is UL recognized and Utilities Patented (8,272,076). This magnetic jet is assembled and tested in the U.S.A.

Retail box includes:
Ecojet MD Magnetic Motor
Motor Cap Lock-Nut
Universal Adapter
Motor Housing Gasket
Motor Housing
Impeller Housing
Magnetic Impeller
Ecojet Cap Cover
AC Power Cord
Manual
Registration Card
Ecojet Tent Card

VIDEO

Ecojet Magnetic Drive Jet Co
Watch on YouTube

RELATED PRODUCTS

ecojetspa.com/whirlpool-magnetic-jet/

Norred law Time Sh... Dashboard - MyCase

ecoJET®

HOME PRODUCTS CONTACT INFO FIND DEALERS SUPPORT

Universal Whirlpool Magnetic Jet System


(Designed for Pedicure Spa Chairs).

The Ecojet Magnetic Drive Jet takes "sanitary" to the next level. This jet system is highly efficient and reliable. With a one-year warranty, Ecojet U.L. recognized, assembled & tested in the USA.

This kit is designed with advanced technology that increases the product longevity and durability. Our goal is to create the best performing whirlpool jet among competitors and most spa chairs in the market is now coming with universal fitment. The Ecojet Magnetic Drive Jet is now comes with universal fitment that fits most magnetic jets cutout for the Ecojet Universal Adapter is 3.5 inches. Any larger opening will have leakages (Please reference manual for further instructions).

The Ecojet MD package includes:

Ecojet® MD Magnetic Motor
Replacement Bushing Kit
Motor Mounting Lever
Motor Housing Gasket
Motor Housing
Impeller Housing
Magnetic Impeller
Ecojet® Cap Cover
AC Power Cord

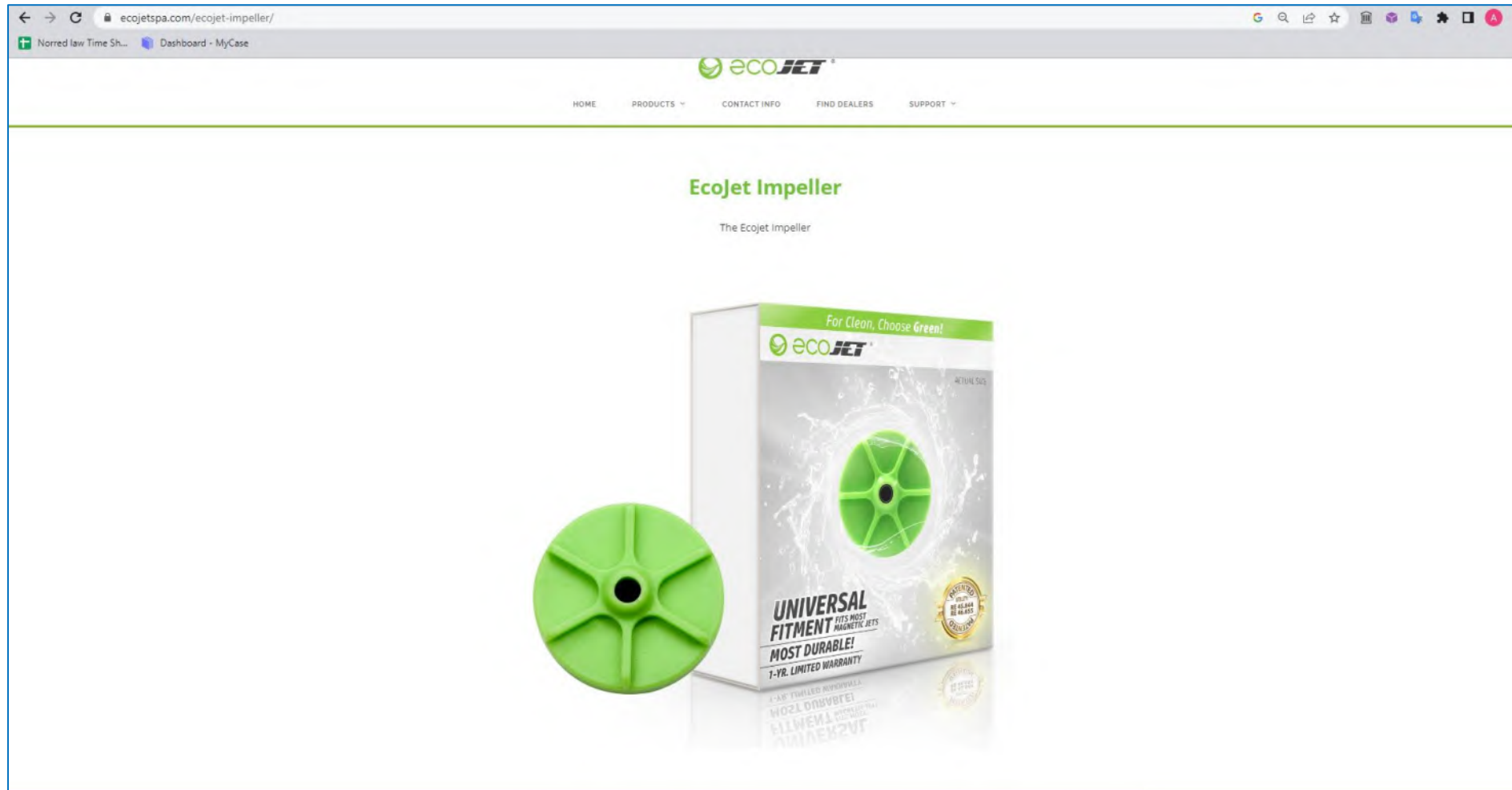


Home About Us Find Dealers Terms & Conditions

Ecojet Universal 3.5 Shafted (with motor and mounting housing)



Ecojet Impeller



**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

**LEXOR MANUFACTURING, LLC,
Plaintiff,**

V.

**LURACO, INC. AND LURACO
HEALTH & BEAUTY, LLC,
Defendants,**

V.

ECOJET, INC., LEXOR, INC.
Cross-Defendants

Case No. 3:18-CV-01933-S

JURY TRIAL DEMANDED

DECLARATION OF THANH LE

I, Thanh Le, hereby declare under penalty of perjury the following:

1. I am Chief Executive Officer for Luraco Health and Beauty, LLC, which currently does business as Luraco Technologies in the above-referenced matter. I have personal knowledge of the facts that I state herein and can competently testify to these facts if I am called upon to do so under penalty of perjury.
2. Dr. Kevin Le and I are co-inventors of the 9,926,933 patent, the 10,451,071 patent, the 10,302,088 patent, the 10,215,177 patent, the 10,215,178 patent, the 10,278,894 patent, and the 10,451,071 shaftless patent.
3. I and Dr. Kevin Le have made and continue to make considerable investment into our domestic manufacturing operations, specifically investing millions of dollars into domestic plant and equipment, labor and capital, and engineering and research and development in regards to Luraco's Magna Jet. From the years 2008 to 2019, Luraco has invested \$1,829,407.23 into engineering costs of the Magna Jet. In the same time period there has been

\$3,301,617 invested into production costs, \$312,694.05 invested into equipment costs, \$11,262,489.78 invested into material costs, \$200,817.68 invested into licenses and patent costs, and \$4,079,890.10 into overhead costs of the production of the Magna Jet.

4. I know Christopher Luong personally, and I am familiar with his various companies from my dealings with him and our mutual customers. I know that he owns and manages his business in Garland, and he owns a number of stores cross the US and Canada. He also operates Ecojet in California.

5. Luraco operates a 42,000 square-foot facility located at 1140 107th St. in Arlington, Texas. The facility was rented in 2006 and then acquired in 2010. The current dollar amount for the value of Luraco Facilities as of the date the complaint is filed approximately \$2,025,000.00. 2007 is the date of investment in equipment used to manufacture or research products practicing the asserted patents owned by Luraco.

6. The Magna Jet product accounts for half of Luraco's revenue in 2019, so assuming that our costs to Luraco a 50% percentage to define costs of the Magna Jet II, Luraco paid \$536,000 in salaries for engineers in 2019, making \$268,000 the amount paid for engineers working on Magna Jet II. The same formula is applied to all calculations concerning Luraco's investment into the asserted patents and associated product, which includes for the Magna Jet II product: two managers ($\$104,000 \times 50\% = \$52K$), two purchasers ($\$60,000 \times 50\% = \$30K$), six Tech Supports ($\$190K \times 50\% = \$95K$), 31 production workers ($\$596K \times 50\% = \$298K$), for a total of \$743K salaries and wages for employees engaged in the practice of those patents.

7. Below is a table showing the types of investments and allocation method devoted to Magna Jet II and the asserted patents:

Type of investment	Salaries, wages, costs per year	Burden calculation ¹	Total paid
2 Managers	\$104,000	\$104,000 x 50%	\$52,000
9 Engineers	\$536,000	\$536,000 x 50%	\$268,000
2 Purchasers	\$60,000	\$60,000 x 50%	\$30,000
6 Tech Supports	\$190,000	\$190,000 x 50%	\$95,000
31 Production Workers	\$596,000	\$596,000 x 50%	\$298,000
Health Insurance	\$29,000	\$29,000 x 50%	\$14,000
Simple IRA	\$32,500	\$32,500 x 50%	\$16,250
Samples and prototypes	\$52,500	\$52,500 x 50%	\$26,250
Major Equipment	\$115,280	\$115,280 x 50%	\$57,640

8. These investments are significant to the pedicure industry and to Luraco. Luraco had owned 100% market share of the magnetic pump for pedicure spas when it was introduced, today Luraco owns around 60% market share. There are few large players in this industry like Lexor and EcoJet and few small importers. As of today, Luraco is the largest magnetic pump manufacture for the pedicure spa industry. The products practicing the asserted patents makes up 50% of Luraco's revenue. Luraco's innovation of the magnetic coupling pedicure spa pump allows salon owners all over the world to use a pedicure spa with a disposable liner. This invention solved major sanitization issues at nail salons. A NBC news report on Luraco's innovation can be found at <https://www.youtube.com/watch?v=IP0iinIFufc>.

9. According to my business records, Lexor and Luraco have interacted as follows:

- a. On April 21, 2009, Lexor ordered Magna Jet and Discharge Pump samples from Luraco. Invoice #3229 for this order is attached to this declaration in Attachment 1.
- b. On May 13, 2009, Lexor discussed with Luraco to order 500 Magna Jets from Luraco. An email chain from Nick La, General Manager of Lexor, is attached to this

¹ Total sales of Magna Jet II is approximately 50% of total company sales of all products. Thus 50% is the percentage used to define costs of Magna Jet II.

declaration in Attachment 2.

c. On June 25, 2009, Lexor ordered Dura Jet 3 and a Discharge Pump samples from Luraco. Luraco's Invoice #3628 regarding this order is attached as Attachment 1.

d. On July 27, 2010, Lexor introduced their PureFlo MG (PureFlo Magna) at Cosmoprof Beauty Trade Show in that is using the Bearing and Shaft design that Luraco used for its Magna Jet.

e. On July 19, 2013, five years after Luraco's Spa Pumps were introduced, Lexor filed their Reissue patent '844.

f. On July 30, 2015, seven years after Luraco's Spa Pumps were introduced, Lexor filed second Reissue patent '655.

g. On July 27, 2018, ten years after Luraco's Spa Pumps were introduced, Lexor used second Reissue patent '655 to file lawsuit against Luraco.

10. Lexor has been aware and cannot claim ignorance of the '071 shaftless patent and the '894 patent. By my direction, counsel for Lexor received information regarding these patents via email on which I was copied, sent from Luraco's counsel on December 27, 2021.

11. Both the '071 shaftless and '894 patents were published publicly on Luraco's website and are printed on the Luraco Jet Assembly. Evidence of these patents on the Assembly and on the Website are attached to this declaration in Attachment 3.

12. I discovered only in November of 2021 that Lexor was producing this product and selling it through Ecojet when an Ecojet dealer approached one of my clients.

13. I declare under penalty of perjury under the laws of the State of Texas and the United States that the foregoing is true and correct.

Dated this 14th day of February 2022, in Arlington, Tarrant County, Texas

A handwritten signature in black ink, appearing to read 'Thanh Le', written over a horizontal line.

Thanh Le

Attachment 1: Invoice #3229

Attachment 2: An email chain from Nick La, General Manager of Lexor

Attachment 3: Evidence of patents



LURACO Technologies, Inc.

1132 107th Street, Arlington, Texas 76011

Phone: +1-817-633-1080

Fax: +1-817-633-1085

sales@luraco.com

www.luraco.com

ORDER INVOICE

Order Number: 3229
Order Date: 4/21/2009
Customer Number: 2129

Sold To: LEXOR , 714 444 4144
NICK LA
14800 GOLDEN WEST STREET
Westminster, CA 92683

Ship To: Same

Qty	Item	Unit Price	Total
1	L0704C - Magna- Jet	0.00	0.00
1	L0807A - Discharge Pump	0.00	0.00
	Tax		0.00
	Shipping		0.00
Order Total			\$0.00

Thank You!

Sample



LURACO Technologies, Inc.

1132 107th Street, Arlington, Texas 76011

Phone: +1-817-633-1080

Fax: +1-817-633-1085

sales@luraco.com

www.luraco.com

ORDER INVOICE

Order Number: 3628
Order Date: 6/25/2009
Customer Number: 2273

Sold To: LEXOR INC 714-444-4095 F
NICK LA 714-444-4144
14800 Goldenwest Str
Westminster, CA 92683

Ship To: Same

Qty	Item	Unit Price	Total
1	L0807A - Discharge Pump	39.95	39.95
1	L0704D - DURA-JET III	59.00	59.00
	Tax		0.00
	Shipping		11.75
Order Total			\$110.70

ORDER NOT PAID - WAIT FOR DURA JET III

Thank You!

From: Nick La [mailto:nla@lexorinc.com]

Sent: Wednesday, May 13, 2009 5:03 PM

To: hana.ngo@luraco.com

Subject: Re: FW: Just a follow up

Attachment 2

Hi Hana,

Yes, I've been so busy with a few projects with deadline this month. Our Engineer is testing the unit and they will get back with question. As far as my concern the price is a bit high, our current PureFlo jet we buy is 50% less then the price you offered.

Other then that the jet looks good, I think it has potential. But we need to do something about pricing.

Nick La
General Manager
Lexor, Inc.
14800 Goldenwest St.
Westminster, CA 92683
www.lexorinc.com
(800) 559-3630

On Wed, May 13, 2009 at 2:32 PM, Hana Ngo <hana.ngo@luraco.com> wrote:

Hi anh Nick,

Hope you doing well;

I had tries to contact you sever time last and this week, but you must be very busy. I just want to touch base with you from last email about Magna Jet and Discharge pump. Do you know when we can start shipping out the 1st order for 500 magna jets and 300 discharge pumps to you? Or do you have may have any concern about our products and pricing. If so please do not hesitate to contact me back. Hope that we can hear from you soon to work out this deal with you.

PS: you can also reach me at my mobile # at 817 528 1318

Thanks and Best Regards,

Hana Ngo
Office/Sales Assistant

LURACO Technologies, Inc.
1132 107th Street
Arlington, TX 76011, USA
Tel: 817-633-1080, Ext 221
Fax: 817-633-1085
Toll Free: 1-800-483-9930
Email: hana.ngo@luraco.com
Web: www.luraco.com

July 27, 2010

Via Certified Mail
Return Receipt Requested

Chris Long, President
Lexor Inc.
14800 Goldenwest Street
Westminster, CA 92683

Re: Luraco Technologies, Inc.'s Magna-JET pump

Dear Mr. Long:

Our firm represents Luraco Technologies, Inc. ("Luraco") in connection with the protection and enforcement of its intellectual property. Luraco has asked us to correspond with you regarding your PureFlo MG or use of PureFlo MG that was recently shown at Cosmoprof North America.

Luraco is a high-tech company dedicated to the research, development, and manufacture of innovative products, including spa jet pumps. In particular, Luraco has invented and manufactured the Magna-JET using magnetic coupling to produce the jet streams with the jet head attached to JET's housing. Luraco has invested substantial resources in research and development of the Magna-JET pump. The Magna-JET is patent pending, with several pending U.S. and international utility and design patent applications protecting various aspects of its structure, function, and ornamental design. Luraco, together with EcoTech Marine and T4 Spa Concepts & Design, LLC, have combined efforts to protect the magnetic jet pump concept used for aquarium and spa applications.

This letter is to inform you that Luraco and its partners take seriously the protection of its proprietary and intellectual property rights, and will take all legally available steps to protect those rights. We also hereby provide you actual notice of our pending utility and design patent applications, and will provide you copies of published patent applications once they become available.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Wei Wei Jeang

From: Jeang, Wei Wei
Sent: Wednesday, September 29, 2010 2:44 PM
To: 'kevin.le@luraco.com'
Cc: Ingram, Linda; Epps-Hilliard, Lydia
Subject: Lexor

We heard from Lexor's attorney. They sent us a number of patents for our consideration. I assume they did a patent search and found these references they thought are prior art. We will send you a copy of the patents. We will also supply a copy to the USPTO.

haynesboone

Wei Wei Jeang

Partner

weiwei.jeang@haynesboone.com

Haynes and Boone, LLP
2505 North Plano Road
Suite 4000
Richardson, TX 75082-4101

(t) 972.739.8631

(f) 972.692.9131

Assistant Linda Ingram: ingraml@haynesboone.com

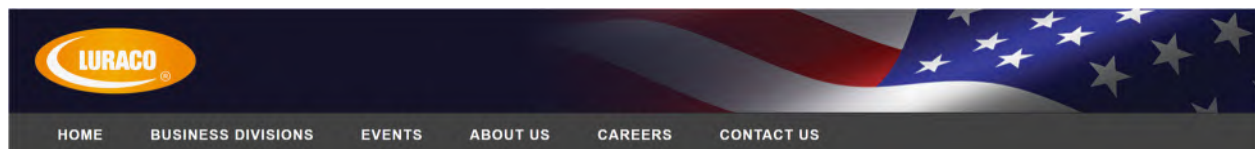
[vCard](#) | [Bio](#) | [Website](#)

CIRCULAR 230 NOTICE: To ensure compliance with requirements imposed by U.S. Treasury Regulations, Haynes and Boone, LLP informs you that any U.S. tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of (i) avoiding penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any transaction or matter addressed herein.

CONFIDENTIALITY NOTICE: This electronic mail transmission is confidential, may be privileged and should be read or retained only by the intended recipient. If you have received this transmission in error, please immediately notify the sender and delete it from your system.

Lexor & EcoJet aware of Luraco '071 and '894 patents.

1. Beginning of 2020, Luraco '071 patent is one of the patents that Luraco used to file a complaint with ITC (International Trade Commission) against Lexor. (The complaint instituted for an investigation on May 20, 2020. Due to Covid lockdown in May and June 2020, Luraco then withdrawn the institution).
2. Both '071 and '894 patents were public on Luraco website



Spa Jets & Drain Pumps

Luraco Magna-Jet® II, Model: L0704C

Luraco Technologies is proud to be the inventor of THE BEST PEDICURE JET IN THE INDUSTRY*

- Patented magnetic coupling technologies (US10,215,178; US10,215,177; US10,288,071; US10,278,894; US10,302,088; US9,926,933; US9,855,188; US 10,451,071; D622,736; D698,368, and other patents pending)
- The first and most reliable Magnetic Pedicure JET in the industry since 2008
- Silent operation
- Dual powerful jet streams 35 degrees with respect to the pump axis
- Extremely easy to install, clean, and service
- Long-life brushless motor
- Green technology (low energy consumption)
- Made in the U.S.A from U.S & Global Components
- *High reliability – Use with confidence and worry-free!*



Luraco Magna-Jet® featured on NBC News

3. Both '071 and '894 patents were printed on Luraco Jet Assembly.



Spa Jets & Drain Pumps

Luraco Magna-Jet® II, Model: L0704C

Luraco Technologies is proud to be the inventor of THE BEST PEDICURE JET IN THE INDUSTRY®

- Patented magnetic coupling technologies (US10,215,178; US10,215,177; US10,288,071; US10,278,894; US10,302,088; US9,926,933; US9,855,188; US 10,451,071; D622,736; D698,368, and other patents pending)
- The first and most reliable Magnetic Pedicure JET in the industry since 2008
- Silent operation
- Dual powerful jet streams 35 degrees with respect to the pump axis
- Extremely easy to install, clean, and service
- Long-life brushless motor
- Green technology (low energy consumption)
- Made in the U.S.A from U.S & Global Components
- *High reliability – Use with confidence and worry-free!*

[Luraco Magna-Jet® II User Manual](#) (Click to view or download the document)



Luraco Magna-Jet® featured on NBC News



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Long	*	
Serial No.	11/544,363	*	
Filed:	October 6, 2006	*	Art Unit: 3751
For:	WATER JET MECHANISM FOR	*	Examiner: Karen L. Younkins
	WHIRLPOOL EFFECT IN	*	
	PEDICURES OR OTHER	*	
	APPLICATIONS	*	

A M E N D M E N T

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action of September 14, 2011, please amend the claims as follows:

Serial No. 11/544,363
Docket No. 024858.008
Page 2

AMENDED CLAIMS

Claims 1-4 (canceled).

Claim 5 (currently amended) A jet pump mounted in a basin of a pedicure chair, or whirlpool bath wherein water is circulated, the jet pump comprising:

a housing having an externally accessible removable cap, the cap having an outer surface and an inner surface, a rim formed circumferentially about the inner surface, an inlet opening for water formed centrally within the cap, a wall being formed circumferentially on the inner surface of the cap surrounding the inlet opening between the inlet opening and the rim, the wall extending from the inner surface of the cap and directed toward the motor,

at least one outlet for water formed through the cap radially between the wall around the inlet opening and the rim, the at least one outlet having a nozzle thereabout formed on the outer surface of the cap whereby water is projected from the nozzle into the basin,

the inlet opening having a plurality of spaced-apart holes,

a motor having an impeller to draw water toward the motor, the motor being disposed within the housing, and the impeller being oriented opposite the inlet opening of the cap,

wherein when the motor is activated, the impeller is rotated, the water is drawn through the water inlet and the water is expelled radially against the wall around the inlet opening, the water circulating within the cap and being directed axially outwardly through the at least one outlet.

Claim 6 (previously presented) The jet pump of claim 5, wherein the series of spaced-apart inlet holes are formed on a convex dome extending above the outer surface of the cap.

Claim 7 (previously presented) The jet pump of claim 5, wherein the impeller is manually removable for cleaning.

Serial No. 11/544,363
Docket No. 024858.008
Page 3

Claim 8 (canceled).

Claim 9 (canceled).

Serial No. 11/544,363
Docket No. 024858,008
Page 4

REMARKS

The present invention claims a wall 52 formed circumferentially on the inner surface of the cap. The *Chen* reference does not suggest nor disclose any structure which can be understood to be a wall as claimed. The area 41 is the inner surface of the cover 40 between the inlet slots 42. It is not raised above the inner surface but actually is the inner surface. The slots 42 in *Chen* serve the same function as the openings 54 in the present application. The present application claims the circumferential wall on the inner surface surrounds the inlet opening between the inlet opening and the rim as shown in the attached marked FIGS. 18-20. None of the figures in the *Chen* reference suggest that there is a circumferential wall surrounding the inlet opening. Neither does the specification discuss such structure. As seen in FIG. 3, there is a mounting recess 41 on the inner surface circumferentially around the inlet slots 42, but there is no wall. Further, FIG. 4 does not show any wall between the cover 40 and the cap 30. There are two spacers between the cover and the cap but they do not have cross sectional marking as would be indicated if they were circumferentially disposed around the inlet. Note in FIG. 3 the small spacer on the inner surface of the cover 40 near the left notch 43. This is the structure shown in FIG. 4. It is not a wall around the inner surface.

The component identified as 411 is one of two snapping latches to retain the cap on the device (column 3, lines 64-67 and FIG. 3). The latch 411 is not circumferentially disposed. The Examiner's Interview Summary suggests that a circumferential wall is shown generally where 411 is located. The latch is on the rim of the cover whereas the applicant claims the wall between the inlet opening and the rim. *Chen* does not disclose nor suggest the claimed structure.

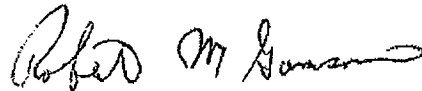
Further, the present invention has at least one outlet for water which has a nozzle 42' formed on the outer surface of the cap as compared to the water outlet of *Chen* which is a periphery formed with

Serial No. 11/544,363
Docket No. 024858.008
Page 5

two opposite arcuate portions (column 4, lines 1-3). As shown in the attached drawings which are based on FIG. 20 of the present application, the unique function of the circumferential wall is more graphically seen. The incoming water is circulated by the impeller and exits through the opening 36' and out of the nozzle 42'. If the wall 52 were not present, the water would not be directed to the outlet and water could even enter through the outlet. Contrary thereto, the device of *Chen* has an outlet formed as an arcuate concave portion of the rim of the cap and the water travels as shown in FIG. 5 of *Chen*. There is no nozzle on the outer surface of the cap of *Chen* which directs the water into the basin.

In summary, the present application claims structure which is not disclosed nor suggested by the cited reference.

Respectfully submitted,



Robert M. Gamson
Reg. No. 32,986
Attorney for Applicant

Nov 30, 2011

Date

HODES, PESSIN & KATZ, P.A.
901 Dulaney Valley Road, Suite 400
Towson, MD 21204
Phone: 410-769-6145
Fax: 410-832-5637
E-Mail: rgamson@hpklegal.com

RMG/chb

G:\files\GAMSON\LEXOR INTERNATIONAL, INC\024858.008\PTO amendment 3.docx

#52
UNIQUE

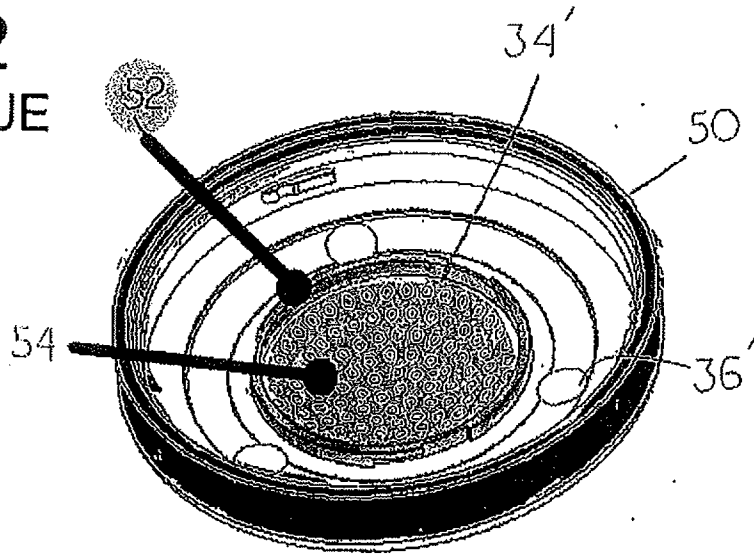


FIG 18

#54 and #42
SAME

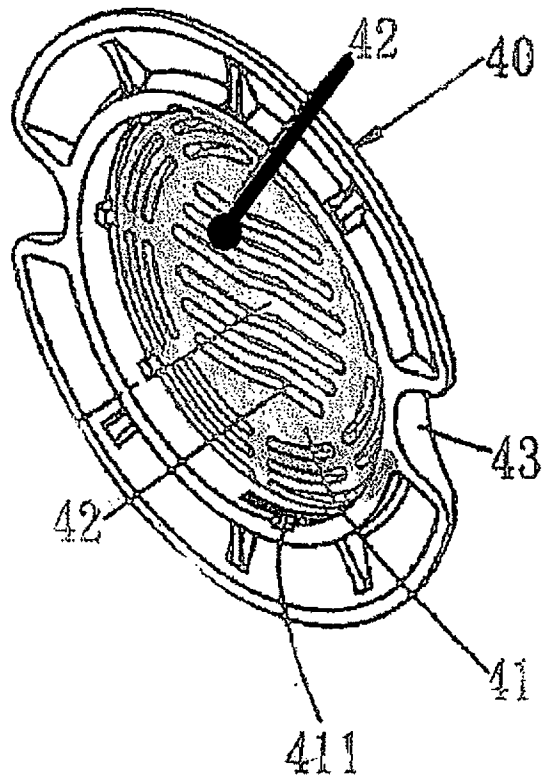


FIG. 3

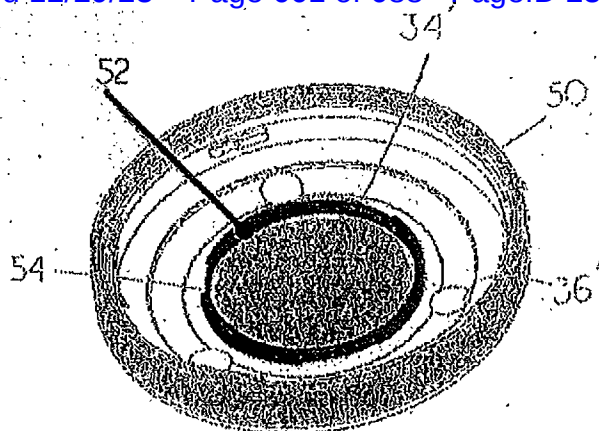


FIG 18

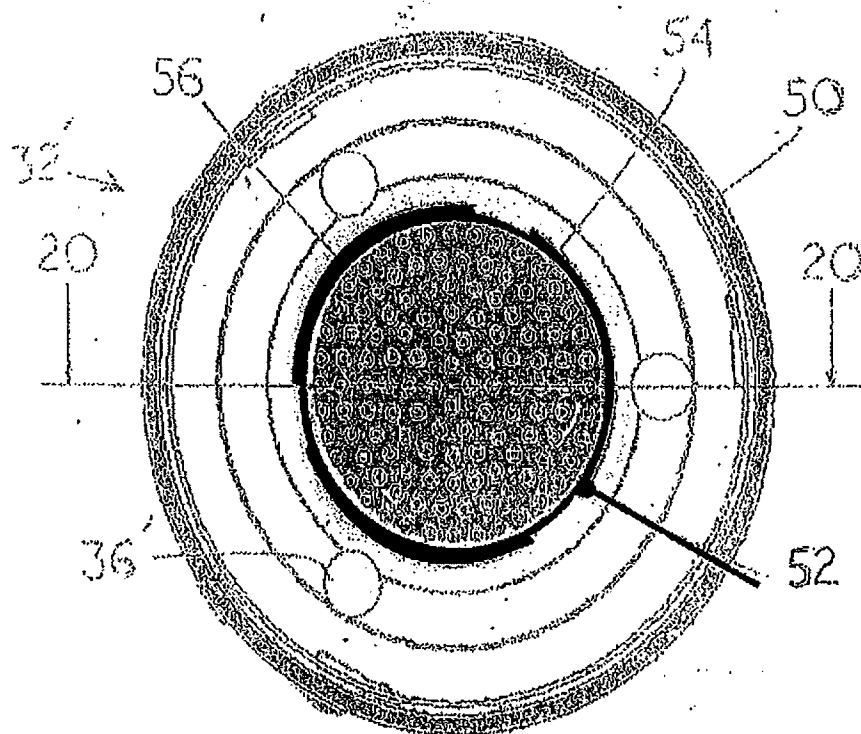


FIG 19

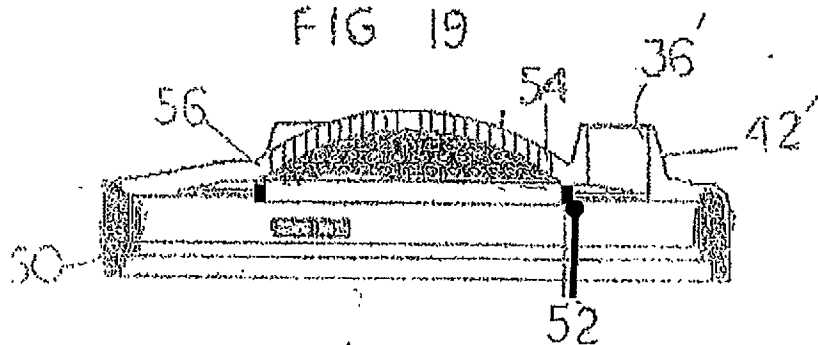


FIG 20

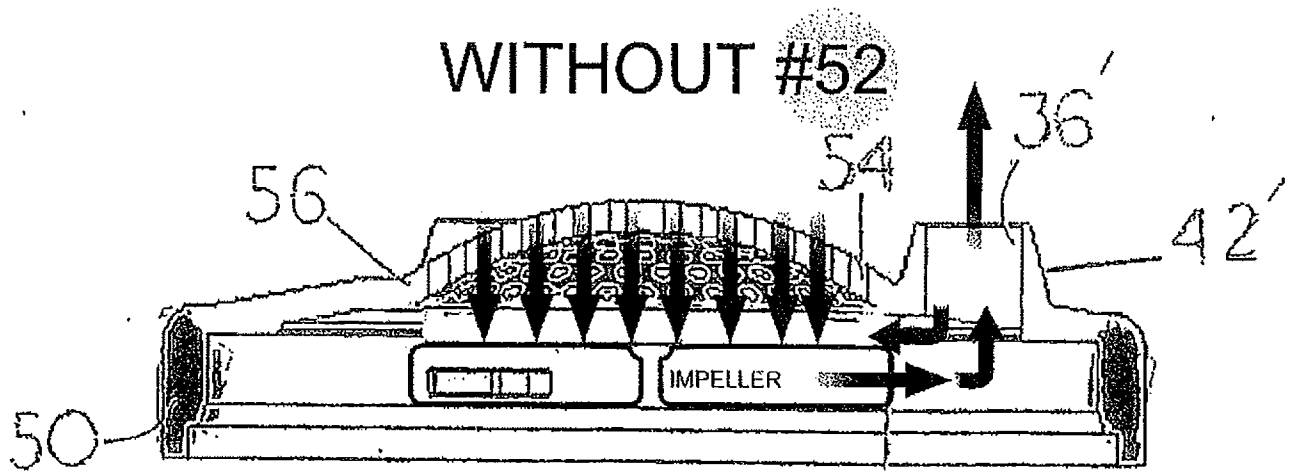


FIG 20

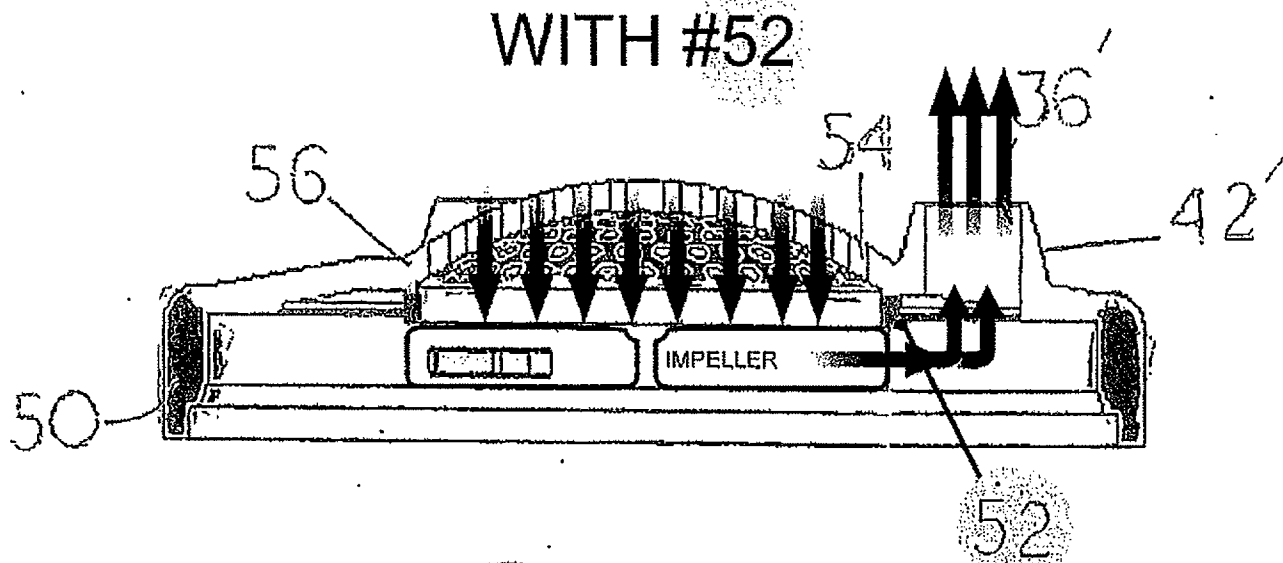


FIG 20

Electronic Acknowledgement Receipt

EFS ID:	11505943
Application Number:	11544363
International Application Number:	
Confirmation Number:	8296
Title of Invention:	Water jet mechanism for whirlpool effect in pedicures or other applications
First Named Inventor/Applicant Name:	Christopher L. Long
Customer Number:	72468
Filer:	Robert M. Gamson
Filer Authorized By:	
Attorney Docket Number:	06118-PA-CIP (0439.0011)
Receipt Date:	30-NOV-2011
Filing Date:	06-OCT-2006
Time Stamp:	10:22:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Long.pdf	350243	yes	8
			ffb35dbbfb5976d3829dd1b8ffafce2a3ce0e95064		

	Document Description	Start	End
	Miscellaneous Incoming Letter	1	1
	Claims	2	3
	Applicant Arguments/Remarks Made in an Amendment	4	8

Warnings:**Information:****Total Files Size (in bytes):**

350243

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 11/544,363		Filing Date 10/06/2006		<input type="checkbox"/> To be Mailed		
APPLICATION AS FILED – PART I											
(Column 1)			(Column 2)		SMALL ENTITY <input checked="" type="checkbox"/> OR		OTHER THAN SMALL ENTITY				
FOR		NUMBER FILED	NUMBER EXTRA		RATE (\$)	FEE (\$)			RATE (\$)	FEE (\$)	
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A		N/A				N/A		
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A	N/A		N/A				N/A		
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A		N/A				N/A		
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =		*	X \$ =		OR		X \$ =		
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =		*	X \$ =				X \$ =		
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.											
APPLICATION AS AMENDED – PART II											
(Column 1)			(Column 2)		(Column 3)		SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	11/30/2011	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	+ 3	Minus	** 20	= 0	X \$30 =	0	OR		X \$ =	
	Independent (37 CFR 1.16(h))	+ 1	Minus	*** 3	= 0	X \$125 =	0	OR		X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
						TOTAL ADD'L FEE		0	OR		TOTAL ADD'L FEE
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	+	Minus	**	=	X \$ =		OR		X \$ =	
	Independent (37 CFR 1.16(h))	+	Minus	***	=	X \$ =		OR		X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
						TOTAL ADD'L FEE			OR		TOTAL ADD'L FEE
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.											
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".											
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

Legal Instrument Examiner:
/ERNEST MARFO/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/544,363	10/06/2006	Christopher L. Long	06118-PA-CIP (0439.0011)	8296
72468	7590	11/01/2011	EXAMINER	
HODES, PESSIN & KATZ, P.A. 901 DULANEY VALLEY ROAD, SUITE 400 BALTIMORE, MD 21204			YOUNKINS, KAREN L	
			ART UNIT	PAPER NUMBER
			3751	
			MAIL DATE	DELIVERY MODE
			11/01/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview SummaryApplication No.
11/544,363Applicant
LONG, CHRISTOPHER L.

Examiner

Art Unit

KAREN L. YOUNKINS

3751

All participants (applicant, applicant's representative, PTO personnel):

(1) KAREN L. YOUNKINS.

(3)_____.

(2) Bob Gamson.

(4)_____.

Date of Interview: 25 October 2011.Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]Exhibit shown or demonstration conducted: ☐ Yes ☒ No.

If Yes, brief description: _____.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☒ 103 ☐ Others

(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 5.Identification of prior art discussed: Chen.**Substance of Interview**

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: Identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Representative for applicant and examiner discussed the attached draft amended language for claim 5. The examiner indicated that she doesn't think the additional proposed language reads over the Chen reference as 41 may be considered an inner surface and a circumferential wall is shown generally where 411 is located, but should such language be submitted the language will be fully considered and treated.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment/K. L. Y./
Examiner, Art Unit 3751

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (If Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/946,899	07/19/2013	Christopher L. Long	1395-002.201	3919

22145 7590 02/06/2015
KLEIN, O'NEILL & SINGH, LLP
18200 VON KARMAN AVENUE
SUITE 725
IRVINE, CA 92612

EXAMINER

SKUBINNA, CHRISTINE J

ART UNIT	PAPER NUMBER
----------	--------------

3754

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

02/06/2015

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

KOS_Docketing@koslaw.com

Office Action SummaryExaminer
CHRISTINE SKUBINNAArt Unit
3754AIA (First Inventor to File)
Status
No**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/15/2014.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 4-26 is/are pending in the application.
 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 4-26 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☒ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 7/15/2014 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
 Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____.
- 4) ☐ Other: ____.

Application/Control Number: 13/946,899

Page 2

Art Unit: 3751

DETAILED ACTION

This Office Action is responsive to application number 13/946,899 **WATER JET MECHANISM FOR WHIRLPOOL EFFECT IN PEDICURES OR OTHER APPLICATIONS**, filed on 7/19/2013. Claims 4-6 and 8-26 are pending. Claims 1-3 and 7 have been cancelled.

Application Data Sheet

The ADS filed 7/19/2013 does not indicate that the present application is a reissue of 11/544,363, now US Patent 8,272,079. Applicant should file an ADS that correctly indicates the Domestic Benefit information:

this application is a reissue of 11/544,363

this application is a continuation of 13/910,977

13/910,977 is a reissue of 11/544,363

11/544,363 is a CIP of 11/312,907

Also when filing the corrected ADS, Applicant should ask for a corrected filing receipt. Correction is required prior to issuance of this case.

Specification

The amendment filed 7/15/2013 proposes amendments to specification that do not comply with 37 CFR 1.173(b), which sets forth the manner of making amendments in reissue applications. A supplemental paper correctly amending the reissue application is required. In this case Amendments to the specification filed 7/15/2014 do not comply with 37 CFR 1.173 as amendments to the written description, including claims, must be made relative to the original patent, showing additions by underlining and deletions by brackets, not strikethroughs.

Drawings

Amendments to the drawings must indicate the drawing sheet to be a replacement sheet with identifying information, as well as indicating every figure (s) that has been amended (e.g. "Fig. 1 Amended"). 37 CFR 1.173 and 1.84. Changes required.

Application/Control Number: 13/946,899

Page 3

Art Unit: 3751

Rejection under 35 U.S.C 251

Claims 4-26 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Greenliant Systems, Inc. et al v. Xicor LLC*, 692 F.3d 1261, 103 USPQ2d 1951 (Fed. Cir. 2012); *In re Shahram Mostafazadeh and Joseph O. Smith*, 643 F.3d 1353, 98 USPQ2d 1639 (Fed. Cir. 2011); *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005); *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claimed subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

In this case pending claims 4-26 violate the rule against recapture, MPEP 1412. The reissue claims are broader than the original patent claims with respect to: ***(i) a wall being formed circumferentially on the inner surface of the cap surrounding the inlet opening between the inlet opening and the rim; and (ii) the at least one outlet having a nozzle thereabout formed on the outer surface of the cap whereby water is projected from the nozzle into the basin.*** These limitations have been omitted from the reissue claims. However, Applicant argued these limitations distinguished the patented invention from the prior art (Remarks filed in original application 11/554,363 on 11/30/2011, pp 4-5), and the omission of these limitations in the reissue claims is an impermissible attempt to recapture surrendered subject matter.

Application/Control Number: 13/946,899

Page 4

Art Unit: 3751

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE SKUBINNA whose telephone number is (571)270-5163. The examiner can normally be reached on Mon -Thurs 9:30-6PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GREG HUSON can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. S./
Examiner, Art Unit 3754
1/27/2015

/HUYEN LE/

Primary Examiner, Art Unit 3754

AMENDMENTS TO THE DRAWINGS

Please amend Figures 3, 7-10, 17-21 and 27 as presented in the attached Replacement Sheets, which are being filed herewith. The amendments to these figures involve only addition of reference numbers, and no structural features have been changed. As such, no new matter has been added. The amendment figures have also been introduced as "FIG. X Amended", where X represents the actual figure number to be amended.

More specifically, the Replacement Sheets reflect the following amendments to the drawings:

FIG. NO.	Replacement Sheet No.	Substance of Amendment
3	3	Addition of reference "A" to the existing axis
7	6	Addition of reference no. 70
8	7	Addition of reference no. 72
9	7	Addition of reference nos. 70 and 72, and an axis line labeled "A"
10	8	Addition of reference no. 72
17	15	Addition of reference no. 70'
18	16	Addition of reference nos. 72', 100, 102, 104 and 106
19	17	Addition of reference nos. 72', 100, 102, 104 and 106
20	17	Addition of reference nos. 70', 72', 100, 102, 104, 106 and an axis line labeled "A"
21	18	Addition of reference nos. 58, 80, 82, 88 and 90
27	23	Addition of reference nos. 80, 82, 84, 86, 88, 90, 92, 94, 100, 102, 104, 106, 110 and an axis line labeled "A"

REMARKS

By this paper Claims 4, 20 and 21 have been amended and new Claims 0-0 have been added. As such, Claims 4-6 and 8-0 are currently pending in the above-referenced reissue application.

Objections to Specification and Drawings

The Office Action dated February 6, 2015 stated that the amendment filed July 15, 2014 was noncompliant with 37 CFR 1.173 in connection with amendments made to the specification, and requested a supplemental paper be filed. Specifically, the Office action noted that deletions in reissue cases must be made by brackets, not strikethroughs.

Applicant notes that the July 15, 2014 Amendment stated that deletions of text of the specification would be depicted in "strikethrough or [[double brackets]]". However, no deletions of the specification text were made, and thus neither strikethroughs nor double brackets were ever used. Thus, Applicant submits that amendments to the specification presented in the July 15th Amendment were technically correct under Rule 1.173. However, to proceed without further delay, Applicant has re-introduced the amendments to the specification, showing the newly added text to the specification as underlined text, and still not making any deletions. The text of these amendments to the specification is the same as presented in the July 15, 2014 Amendment.

The Office action also stated that the amendments to the drawings were non-compliant with 37 CFR 1.173 and 1.84, and that each figure that has been amended must be identified as amended. In order to resolve the Examiner's concerns, Applicant here re-introduces the amended figures along with the legend "FIG. X Amended", where "X" represents the figure number being amended.

Applicant contends that all of the informalities noted by the Examiner have been addressed and resolved.

Replacement ADS

The Office Action requested a replacement ADS to more clearly identify this application as a reissue of Ser. No. 11/544,363, now US Patent No. 8,272,079. A replacement ADS is attached and Applicant will request a corrected filing receipt.

Recapture

The Office Action rejected claims 4-26 under 35 USC 251 as being an improper recapture of broadened claimed subject matter allegedly surrendered in the application for the patent

Serial No.: 13/946,899

Attorney Docket No.: 1395-002.201

upon which the present reissue is based. Applicant respectfully traverses the rejection. Nevertheless, Applicant has amended independent Claims 4 and 21 to ensure there is no recapture.

The Office action states, on page 3,

USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claimed subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

In this case pending claims 4-26 violate the rule against recapture, MPEP 1412. The reissue claims are broader than the original patent claims with respect to: *(i) a wall being formed circumferentially on the inner surface of the cap surrounding the inlet opening between the inlet opening and the rim; and (ii) the at least one outlet having a nozzle thereabout formed on the outer surface of the cap whereby water is projected from the nozzle into the basin.* These limitations have been omitted from the reissue claims. However, Applicant argued these limitations distinguished the patented invention from the prior art (Remarks filed in original application 11/554,363 on 11/30/2011, pp 4-5), and the omission of these limitations in the reissue claims is an impermissible attempt to recapture surrendered subject matter.

OA, p. 3

Applicant has incorporated text similar to that suggested by the Examiner into independent Claims 4 and 21. However, the text is not exactly the same as suggested by the Examiner or as added to original Claim 1 during original prosecution of the patent. This, however, is allowable and proper under the recapture rules, and there is no recapture in amended Claims 4 and 21.

Per MPEP §1412.02(C), even if a claim limitation is broader in an aspect relating to subject matter surrendered in the original prosecution, there is no recapture if the claims were materially narrowed in other respects. MPEP §1412.02(C)(2)(d) gives specific guidance that is relevant here, and is thus reproduced below:

Assume the combination AB was originally claimed in the application, and was amended in reply to an art rejection to add element C and thus

Serial No.: 13/946,899

Attorney Docket No.: 1395-002.201

provide the combination ABC (after which the patent issued). A reissue application is then filed, and the reissue application claims are directed to the combination ABC_{broadened}. The ABC_{broadened} claims are narrowed in scope when compared with the canceled claim subject matter AB, because of the addition of C_{broadened}. Thus, the claims retain, in broadened form, the limitation argued/added to overcome art rejection in original prosecution. In this instance, a recapture rejection can be made even though ABC_{broadened} is narrower than canceled claim subject matter AB, but **only** if C_{broadened} was “well known in the prior art”. See *In re Mostafazadeh*, 643 F.3d 1353, 1361, 98 USPQ2d 1639, 1644 (Fed. Cir. 2011). On the other hand, “if the patentee modifies the added limitation such that it is broader than the patented claim yet still materially narrows relative to the original claim, the recapture rule does not bar reissue.” *In re Youman et al*, 679 F.3d 1335, 1347, 102 USPQ2d 1862, 1870 (Fed. Cir. 2012). Any recapture of surrendered subject matter that was in prior art of the original prosecution forms the ceiling for determining whether the modified limitation is materially narrowing. *Id.*

-MPEP §1412.02(C)(2)(d) (emphasis added)

Independent Claims 4 and 21 have scope and language quite different than Claim 1 of the original patent. Thus, the precise wording used in the original patent is not necessarily appropriate, and the amendments to Claims 4 and 12 are somewhat different. However, as noted above, such different language is perfectly appropriate, even if it is broader in some respects than the language in the original patent.

Claim 4, as amended, reads as follows (showing current amendments underlined):

4. (Twice Amended) A jet pump sized and shaped for use in a basin of a pedicure chair or in a whirlpool bath wherein water is circulated, the jet pump comprising:

a housing supporting a motor rotatably coupled to an impeller so as to drive the impeller about an axis, the housing comprising a shoulder configured to mount the housing to a wall of the pedicure chair or whirlpool bath so that a housing front part extends into the basin;

a cap having an outer surface, an inner surface, and a circumferential rim, the cap releasably engaged with the housing front part so as to define an interior chamber between the cap inner surface and a housing inner surface of the housing front part, the cap comprising a plurality of spaced-apart holes formed through the cap and defining an inlet aligned with the axis, a wall being formed circumferentially on the inner surface of the cap surrounding at least one of the holes of the inlet between the at least one of the holes of the inlet and the circumferential rim, and an outlet opening between the inlet and the

Serial No.: 13/946,899

Attorney Docket No.: 1395-002.201

circumferential rim, the outlet opening having a nozzle thereabout, the nozzle formed on the outer surface of the cap;

the housing inner surface comprising a flat portion that lies in a reference plane normal to the axis and has a reference slope, and an inclined portion disposed radially outwardly from the flat portion, a first point on the inclined portion having a first slope that is greater than the reference slope, the housing inner surface terminating at an outer edge and having a second slope at or adjacent the outer edge, the second slope being greater than the first slope;

the outer edge being circular, the inner surface of the cap releasably engaging the outer edge so that the outlet opening is aligned with the housing inner surface at or adjacent the outer edge; and

the impeller disposed within the interior chamber and comprising a plurality of vanes that extend radially outwardly from the axis, the impeller being rotatable by the motor to draw water axially through the inlet and direct the water radially within the interior chamber so that the water flows over the inclined portion ~~and the outer surface~~ and through the outlet opening and nozzle, whereby water is projected from the nozzle into the basin.

Applicant notes that the language added to Claim 4 is almost identical to the language excerpt “(i)” suggested by the Examiner on page 3 of the Office Action. However, Claim 4 does not recite an “inlet opening”, and instead recites “a plurality of spaced-apart holes formed through the cap and defining an inlet . . .”. Such language is consistent with col. 5, lines 30-31 of the original patent. The language excerpt “(ii)” suggested by the Examiner on page 3 of the Office Action is also very similar to the language added to the claim in order to recite the nozzle. However, for clarity the language was split up. Notably, the text “and the outer surface” has been deleted because it appears to have been a typographical error. The term “reference” has been added to provide antecedent basis for recitations on dependent claims, such as claim 17.

Whether or not the language added to Claim 4 is broader than the language added to Claim 1 during prosecution of the original patent, Applicant notes that the added language is not “well known in the prior art” (see excerpt of MPEP1412.02(C)(2)(d) above), and thus does not recapture subject matter.

Applicant submits that independent Claim 4, as amended, clearly does not recapture any surrendered subject matter, and respectfully requests that the rejection under §251 be withdrawn. Applicant also notes that a number of new dependent claims have been added. These dependent claims recite still additional subject matter that materially narrows the claim in further materially narrows Claim 4 in respects related to the surrendered subject matter.

Claim 21, as amended, reads as follows (showing current amendments underlined):

21. (Twice Amended) A jet pump sized and shaped for use in a basin of a pedicure chair or in a whirlpool bath wherein water is circulated, the jet pump comprising:

Serial No.: 13/946,899

Attorney Docket No.: 1395-002.201

a housing supporting a motor rotatably coupled to an impeller so as to drive the impeller about an axis, the housing comprising a shoulder configured to mount the housing to a wall of the pedicure chair or whirlpool bath so that a housing front part extends into the basin;

a cap having an outer surface, ~~and~~ an inner surface, and a circumferential rim, the cap releasably engaged with the housing front part so as to define an interior chamber between the cap inner surface and a housing inner surface of the housing front part, the cap comprising a plurality of spaced-apart holes formed through the cap and defining an inlet disposed at and adjacent the axis, a wall being formed by the inner surface of the cap between at least one of the holes of the inlet and the circumferential rim, the wall extending circumferentially so as to substantially surround the at least one of the holes, and an outlet opening is radially spaced from the inlet, the outlet opening communicating with a nozzle formed on the outer surface of the cap;

the housing inner surface extending radially outwardly from the axis and terminating at a circular outer edge, a first portion of the housing inner surface being radially spaced a distance from the axis and having a first slope relative to a plane defined normal to the axis, a second portion of the housing inner surface disposed radially outwardly from the first portion and defined at and adjacent the outer edge, the second portion of the housing inner surface at a point along the second portion having a second slope relative to a plane defined normal to the axis, the second slope being greater than the first slope;

the inner surface of the cap releasably engaging the circular outer edge so that the outlet opening is aligned with the second portion of the housing inner surface; and

the impeller disposed within the interior chamber and comprising a plurality of vanes that extend radially outwardly from the axis, the impeller being rotatable by the motor to draw water axially through the inlet and direct the water radially within the interior chamber so that the water flows over the first portion and second portion of the housing inner surface and is directed toward and through the outlet opening of the cap, and further through the nozzle and into the basin.

As with Claim 4 discussed above, Applicant notes that the language added to Claim 21 is similar to the language excerpt “(i)” suggested by the Examiner on page 3 of the Office Action. However, Claim 21 does not recite an “inlet opening”, and instead recites “a plurality of spaced-apart holes formed through the cap and defining an inlet . . .”. Such language is consistent with col. 5, lines 30-31 of the original patent. The language has also been rearranged somewhat, improving readability. Notably, the text recites the wall being formed “by” the inner surface of the cap rather than “on” the inner surface of the cap.

The language excerpt “(ii)” suggested by the Examiner on page 3 of the Office Action is also very similar to the language added to Claim 21 in order to recite the nozzle. However, for clarity the language was split up. Whether or not the language added to Claim 21 is broader than the language added to Claim 1 during prosecution of the original patent, Applicant notes that the

Serial No.: 13/946,899

Attorney Docket No.: 1395-002.201

added language is not “well known in the prior art” (see excerpt of MPEP1412.02(C)(2)(d) above), and thus does not recapture subject matter.

Applicant submits that independent Claim 21, as amended, clearly does not recapture any surrendered subject matter, and respectfully requests that the rejection under §251 be withdrawn. Applicant also notes that a number of new dependent claims have been added. These dependent claims recite still additional subject matter that materially narrows the claim in further materially narrows Claim 21 in respects related to the surrendered subject matter.

New Claims

New Claims 27-34 have been added to more thoroughly recite subject matter considered to be part of the invention and to further materially narrow the claims. Claims 29-0 depend from independent Claim 4 and both recite additional patentable subject matter and materially narrow the claim in other respect relating to the recited wall. Claims 27 and 28 depend from independent Claim 21 and both recite additional patentable subject matter and materially narrow the claim in other respect relating to the recited wall. No new subject matter is added by these new claims.

Conclusion

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office action are inapplicable to the current claims. Accordingly, issuance of a Notice of Allowance is requested.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1159.

Respectfully submitted,

Klein, O'Neill & Singh, LLP

Dated: July 6, 2015

By /Glen L Nuttall/
Glen L Nuttall, Reg. No. 46,188
Telephone: (949) 955-1920

Klein, O'Neill & Singh, LLP
16755 Von Karman, Suite 275
Irvine, CA 92606
T (949) 955-1920
F (949) 955-1921

REMARKS

By this paper Claims 4 and 11 have been amended, Claims 9 and 10 have been cancelled without prejudice, and new Claims 17-25 have been added. As such, Claims 4-8 and 11-25 are currently pending in the above-referenced reissue application.

Recapture Does Not Apply Because Claims Recite A Separate Species

The Office action rejected Claims 4-16 under 35 USC 251 as being an improper recapture of broadened claimed subject matter. Applicant respectfully traverses the rejection, and contends that a recapture analysis should not be triggered as to Claims 4-16, because these claims are directed to a different species than the patent claims. More specifically, **in a prior reissue application, Claims 4-16 were subject to a restriction requirement, and identified by the examiner as a different species than the patent claims.** Thus, per MPEP 1412.02(I)(B)(1), a recapture analysis is not triggered for these claims.

The present application is a continuation of reissue application no. 13/910,977, which is a continuation of reissue application no. 11/544,363, which was a reissue application of the original patent (US 8272079). The '363 application originally recited patent claims 1-3 and new reissue claims 4-17. ***Claims 5-17 in the '363 application were identical to Claims 4-16 as initially presented in the present application.*** A restriction requirement was issued in the '363 application on 12/09/2013. An excerpt from that restriction requirement is reproduced below:

<i>Election/Restrictions</i>	
1.	Claims 1-17 are pending.
2.	Newly submitted claims 5-17 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 5-17 are directed to a separate Species than the invention that was originally claimed.
3.	The Species are detailed as follows: <ul style="list-style-type: none">a. Species A – the apparatus shown in Figures 3-16, which is drawn to a jet pump with a stator and a rotor and a cap with a central inlet;b. Species B- the apparatus shown in Figures 17-27, which is drawn to a jet pump with an impeller and a cap with a plurality of inlets and a wall (52) on an inner surface.
In accordance with 37 CFR 1.176 and MPEP § 1450 Species B, claims 1-4 have been constructively elected for the Applicant as it is drawn to the original patent claims. Claims 5-17 corresponding to non-elected Species A have subsequently been withdrawn from consideration.	

As noted above, Claims 4-16 as presented in this application (by the Preliminary Amendment filed July 30, 2015) are identical to Claims 5-17 of the '363 application, which were

Attorney Docket No.: 1395-002.202

determined to be a different species than patent claims 1-3. As such, **current Claims 4-16 remain directed to a different species than the patent claims.**

As stated in MPEP 1412.02(I)(B)(1), which discusses recapture analyses, “the focus in the analysis of the second step must be on the subject matter that was surrendered during the original application prosecution in the context of the then-existing claims, **not separate inventions/embodiments/species, which do not even trigger a recapture analysis.**” (emphasis added).

The following excerpts from MPEP 1412.02(I)(B)(1) further address this issue:

In the decision of *In re Youman*, 679 F.3d 1335, 102 USPQ2d 1862 (Fed. Cir. 2012), the Federal Circuit explained:

Whereas the recapture rule applies when surrendered subject matter is being reclaimed, overlooked aspects by definition were never claimed and thus never surrendered. *See Mostafazadeh*, 643 F.3d at 1360 [98 USPQ2d at 1644]. Rather, as we explained in *Mostafazadeh*, “overlooked aspects” is a separate inquiry under reissue that is independent of whether or not the recapture rule applies. 679 F.3d at 1347, 102 USPQ2d at 1870.

...

Hester Industries, Inc. v. Stein, Inc., [142 F.3d at 1472, 46 USPQ2d 1641 (Fed. Cir. 1998)], addressed this concept of overlooked aspects, stating:

[T]his principle [i.e., avoidance of the recapture rule], in appropriate cases, may operate to overcome the recapture rule when the reissue claims are materially narrower in other overlooked aspects of the invention. The purpose of this exception to the recapture rule is to allow the patentee to obtain through reissue a scope of protection to which he is rightfully entitled for such overlooked aspects. 142 F.3d at 1482-83, 46 USPQ2d at 1649-50. (Emphasis added)

See also *B.E. Meyers & Co. v. United States*, 47 Fed.Cl. 200, 56 USPQ2d 1110 (Fed. Cl. 2000), where the Court of Federal Claims permitted the complete removal of a limitation that was added to obtain the patent, where the replacement limitation provided a separate invention.

As Claims 4-16 are directed to a different species than the original patent claims, they are directed to overlooked aspects of the invention, and no recapture analysis of these claims should be triggered. Accordingly, it is respectfully requested that the recapture rejection of these claims be withdrawn.

Objection to the Oath/Declaration

The Office action objected to the reissue oath/declaration as defective because it refers to deleted language that was determined not to be an “error” – following reasoning similar to that used in connection with the recapture rejection discussed above. However, as discussed above, the claims are directed to overlooked aspects, and do not trigger a recapture analysis. As such, it is submitted that the statement of error made in the oath/declaration is appropriate.

Correction of Spelling of Inventor’s Name

The above amendments to the specification correct the spelling of the inventor’s name from “Long” to “Luong”. It also corrects the inventor’s residence. Attached is marked-up ADS that sets forth the correct spelling and residence.

Claims Are Patentable Over Chang

The Office action rejected Claims 4, 8 and 9 under 35 USC 102(e) as anticipated by US Patent No. 6,836,908 to Chang. The rejection is respectfully traversed. Nevertheless, independent Claim 4 has been amended to further distinguish it from the cited art.

Chang teaches a device in which an electric motor has a propeller shaft that extends through a back base 5 and container 4 to connect to a revolving plate 3 that has vanes 31. A water outlet plate 2 sits atop the revolving plate 3, and a hood 1, which appears to be a cover.

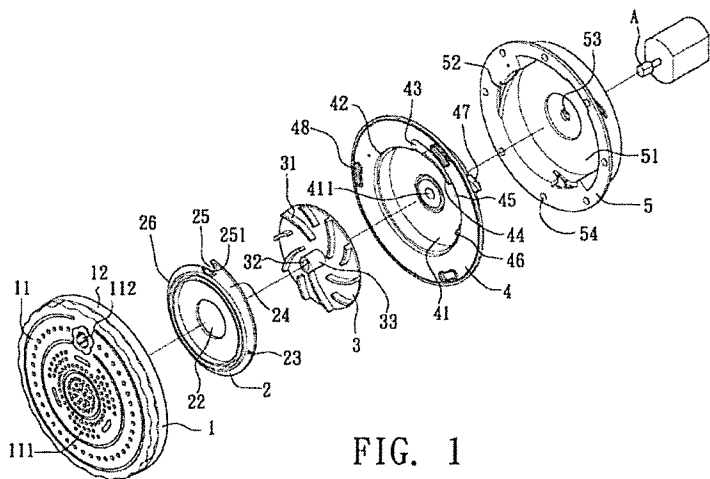


FIG. 1

The hood 1 has “several water inlet holes 111 and a larger water outlet hole 112” (col. 1, l. 67-col. 2, l. 1). As shown in Fig. 1 (adjacent) and other figures, the water inlet holes 111 appear to be scattered all over the hood 1, including at and adjacent the water outlet hole 112. Thus, there is no radial space between inlet holes 111 and the outlet hole 112.

The water outlet plate 2 is interposed between the hood 1 and the vanes 31 of the revolving plate 3. As shown in Fig. 4, Chang’s container 4 has a wall 44 through which is formed a wall hole 45. The wall hole 45 opens into a passage behind the wall 44, which passage leads to

Attorney Docket No.: 1395-002.202

a hole path 43 which appears to be aligned with the outlet hole 112. Thus, the wall 44 appears not to be contiguous, nor does it form a full circle.

Chang does not teach or suggest all of the limitations of amended Claim 4. For example, Claim 4 recites, *inter alia*, “the cap comprising a plurality of spaced-apart holes formed through the cap and defining an inlet aligned with the axis, and an outlet opening through the cap inner surface, the outlet opening being radially spaced from the inlet” (emphasis added). This limitation is not taught by Chang. Instead, Chang’s inlet holes 111 appear to be scattered all over the hood 1, including adjacent Chang’s outlet hole 112.

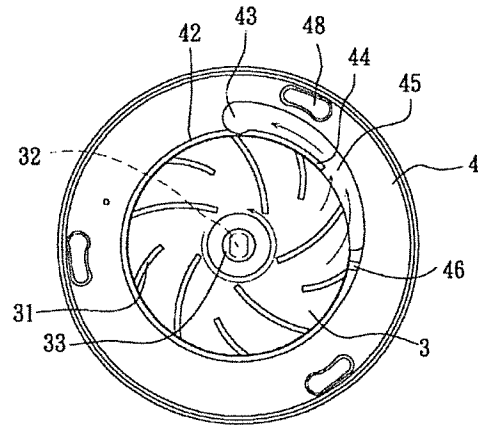


FIG. 4

Claim 4 additionally recites, *inter alia*,

the surface of the housing front part within the pump chamber comprising a flat portion and an outer portion, the outer portion extending in a direction transverse to the flat portion and terminating at an outer edge, the outer edge forming an unbroken circle, and when the cap is engaged with the housing front part the outer edge engages the cap inner surface and the outlet opening of the cap is adjacent the outer edge (emphasis added).

This limitation is also not taught or suggested by Chang.

Since Chang does not teach or suggest all of the limitations of amended Claim 4, it is respectfully requested that the corresponding rejection of Claim 4, and the claims that depend therefrom, be withdrawn.

Claims Are Patentable Over Chen

The Office action rejected Claims 4, 8-10, 11, 13 and 16 under 35 USC §102(b) as being unpatentable over U.S. Patent Pub. No. 2005/0262627 to Chen. The rejection is respectfully traversed. Also, Claim 4 has been amended to further distinguish the cited reference. It is submitted that all of the claims as amended define over Chen.

Chen teaches a spraying head assembly for a massaging tub. The assembly is made up of “a motor 10, a housing 20, a cap 30, and a cover 40 (col. 2, ll. 56-57).

As shown in Figures 2 and 5 (reproduced adjacent), the housing 20 fits atop the motor 10. Two opposing “oblique water outlet recesses 213” are formed in the housing (col. 3, l. 7), and thus Chen’s housing does not form a complete circle about its edge.

The cap 30 is made up of a circular plate 31 and a mounting ring 32 that fits within the housing. The cap 30 has an inlet hole 311 in the center of plate 31, and opposing water outlet openings 321 formed through the ring 32. The openings 321 align with the housing’s recesses 213 when the cap ring 32 is fit within the housing 20. The cover 40 is fit atop the cap 30.

As best shown in FIG. 5, due to rotation of rotor 12 within the cap 30, water is drawn through slots 42 of the cover 40 and inlet hole 311 of the cap 30 and is forced through the cap’s outlet openings 321 and out the oblique outlet recesses 213 of the housing 20. The cap’s ring 32 appears to fill space in the housing around the rotor 12 so that most surfaces of the housing are shielded from having any water contact or any role in directing water flow.

Chen does not teach or suggest all of the limitations of the claims as amended.

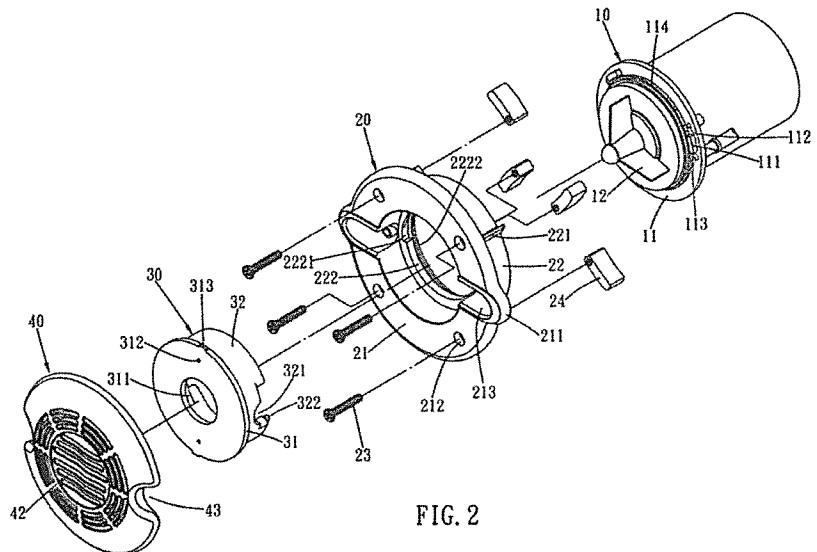


FIG. 2

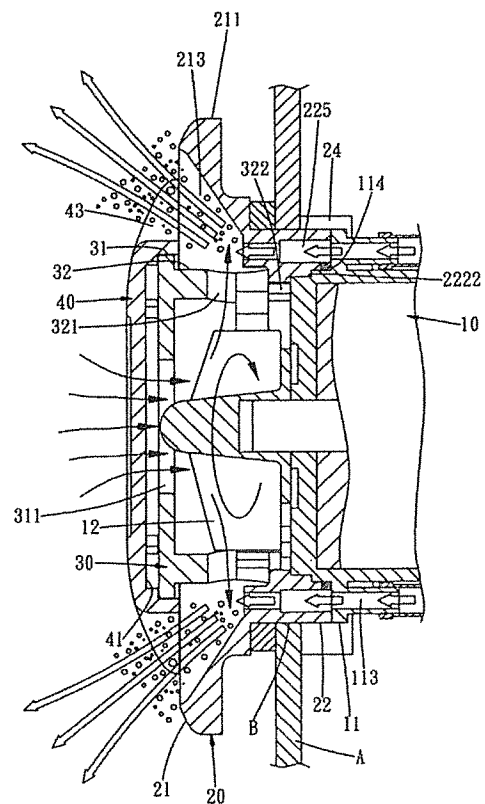


FIG. 5

Claim 4 has been amended, and currently recites:

4. A jet pump configured to be mounted in a basin of a pedicure chair or in a whirlpool bath wherein water is circulated, the jet pump comprising:
- a housing supporting a motor having a stator and a rotor and configured to rotatingly drive a plurality of vanes about an axis, the housing comprising a shoulder configured to mount the housing to a wall of the pedicure chair or whirlpool bath so that a housing front part extends into the basin;
 - a cap having an outer surface and an inner surface, the cap releasably engaged with the housing front part so as to define a pump chamber between the cap inner surface and a surface of the housing front part, the cap comprising a plurality of spaced-apart holes formed through the cap and defining an inlet aligned with the axis, and an outlet opening through the cap inner surface, the outlet opening being radially spaced from the inlet;
 - the plurality of vanes disposed within the pump chamber and rotatable by the rotor to draw water axially through the inlet and direct the water radially and out the outlet opening;
 - the surface of the housing front part within the pump chamber comprising a flat portion and an outer portion, the outer portion extending in a direction transverse to the flat portion and terminating at an outer edge, the outer edge forming an unbroken circle, and when the cap is engaged with the housing front part the outer edge engages the cap inner surface and the outlet opening of the cap is adjacent the outer edge; and
 - a first point along the cap inner surface being defined at the inlet, a second point along the cap inner surface being defined adjacent the outlet opening, the first point and second point being spaced radially and axially relative to one another.

The Office action compares Chen's cap 30 to the cap recited in Claim 4. However, Chen's cap 30 has only a single inlet 311, in contrast to the required "plurality of spaced-apart holes formed through the cap and defining an inlet". Further, Chen's water outlet recesses 213 are part of its housing 20, which has no "outer edge forming an unbroken circle" as required by the claim. Further, it does not appear that Chen has any portion comparable to an "outer edge" of an "outer portion" that engages cap 30, or that Chen teaches any "outlet opening of the cap [being] adjacent the outer edge" as required by Claim 4.

Since Chen does not teach or suggest all of the limitations of amended Claim 4, it is respectfully requested that the rejection of this claim, and the claims that depend therefrom, be withdrawn.

New Claims

New Claims 17-25 have been added to more thoroughly recite subject matter considered to be part of the invention and to further materially narrow the claims. Claim 17 is an independent claim from which Claims 18-25 depend. No new matter is added by the new claims.

Attorney Docket No.: 1395-002.202

Conclusion

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office action are inapplicable to the current claims. Accordingly, issuance of a Notice of Allowance is requested.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1159.

Respectfully submitted,

Klein, O'Neill & Singh, LLP

Dated: March 30, 2015

By /Glen L Nuttall/

Glen L Nuttall, Reg. No. 46,188

Telephone: (949) 955-1920

Klein, O'Neill & Singh, LLP
16755 Von Karman, Suite 275
Irvine, CA 92606
T (949) 955-1920
F (949) 955-1921



Fox Rothschild LLP
ATTORNEYS AT LAW

Constellation Place
10250 Constellation Blvd, Suite 900
Los Angeles, CA 90067
Tel (310) 598-4150 Fax (310) 556-9828
www.foxrothschild.com
JOHN SHAEFFER
Email: Jshaeffer@FoxRothschild.com

Collins Manufacturing Company
2000 Bower Road
Cookeville, TN 38506
800-292-6450

July 27, 2018

Re: Federal Lawsuit Against Luraco for Sale of Pipeless Water Pumps

To Whom It May Concern:

On July 27, 2018, Lxor Manufacturing, Inc. ("Lxor") filed a patent infringement lawsuit against Luraco, Inc. and Luraco Health & Beauty, LLC (collectively, "Luraco"). A copy of the filed Complaint is attached hereto. As set forth in the Complaint, Lxor alleges that Luraco's pumps infringe US Patent No. RE46,655 (the "'655 Patent'"), which is entitled "Water Jet Mechanism for Whirlpool Effect in Pedicures or Other Applications." Specifically, Lxor alleges that Luraco infringes the '655 Patent by importing and selling the following pipeless water pumps: "Magna-JET," "Dura-JET III," "Dura-JET 4," "Magna-JET with built-in LED Lights," and "Dura-JET III with built in LED Lights." It is my understanding that this constitutes all of the pipeless pumps currently offered by Luraco. By way of the Complaint, Lxor has asked the Court for damages, an injunction against future sales, and attorneys' fees.

Please note that any company or individual that buys or sells the pipeless water pumps identified above can also be sued for patent infringement.

Sincerely,



John Shaeffer

JS:jo

Enclosure

A Pennsylvania Limited Liability Partnership

California	Colorado	Connecticut	Delaware	District of Columbia	Florida	Illinois
Minnesota	Nevada	New Jersey	New York	Pennsylvania	Texas	Washington